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March 22, 2013

Ms. Patricia Coppolino
Vermont Department of Environmental Conservation
1 National Life Drive – Davis 1
Montpelier, VT 05620-3704

Re: Park Street Residential Air Sampling
Bennington, Vermont
JCO Project #: 3-2218-5

Dear Ms. Coppolino:

This letter provides a summary of air sampling performed by The Johnson Company in homes on Park Street in Bennington, Vermont, as specified by the approved Scope of Work dated November 20, 2012.

The Johnson Company sent a letter to residents at seven Park Street addresses on December 11, 2012, offering the opportunity to have samples collected of indoor air in their houses on January 7, 2013. These letters are included in Attachment A. Letters were sent to 402, 403, 406, 408, 410, 414, and 418 Park Street. The Johnson Company attempted to contact residents of the same addresses by telephone to inform them of the sampling program and requesting that they review the letter. Telephone conversations occurred with occupants of 403 and 406 Park Street, and voice mails were left for occupants of 408 – 418 Park Street. The telephone number associated with 402 Park Street was reported to be disconnected. During the week of December 31, 2012, a second voice mail was left for residents who had not been reached previously.

The Johnson Company was contacted by residents of 403, 406, 410, 414, and 418 Park Street to schedule sampling. An initial round of sampling was performed on January 7-9, 2013. No sampling was scheduled or performed at 402 and 408 Park Street. Samples were submitted to Northeast Analytical, which forwarded them to Pace Analytical of Minneapolis, MN for analysis of polychlorinated biphenyls (PCBs) by EPA Method 1668A. The laboratory reported significant levels of PCBs in the method blank associated with these samples, with method blank concentrations approximately equal to sample concentrations in some cases. As a result, the laboratory concluded that certain samples "do not provide significant information about PCB content." The Johnson Company contracted Phoenix Chemistry Services of Ferrisburgh, Vermont (Phoenix) for an independent evaluation of the sample results. This evaluation is provided in Attachment 1. Based on the information reviewed, Phoenix concluded that overall, the results "do not have usable data."

The Johnson Company attended a meeting with VT DEC and the Vermont Department of Health (VDH) to discuss the result on February 7, 2013. At this meeting, a consensus was reached to discard the results of the January sampling and repeat the sampling in the same residences. All residents that previously participated in the sampling agreed to a second sampling event. As with the January effort, no sampling was performed at 402 and 408 Park Street in February of 2012.

Sample Collection Summary

Ten samples were collected from the five residences, as summarized in the table below.

Address	Locations Sampled
403 Park Street	1) Living Room
406 Park Street	1) Basement, 2) Dining Room
410 Park Street	1) Basement, 2) Living Room
414 Park Street	1) Basement, 2) Living Room
418 Park Street	1) Basement, 2) Kitchen, 3) Outdoor

Sample Collection Methods

Samples were collected by using a personal sampling pump (SKC 224-PCXR8) to draw air through a polyurethane foam (PUF) cartridge provided by the laboratory. Before connecting the sample cartridge, the pump was connected to a flow calibrator (Bios Defender 510M) and a spare PUF cartridge used for calibration, and adjusted to a target flow rate of 5.0 liters per minute (Lpm). In some cases, the sampling pump was not able to attain a flow rate of 5.0 Lpm or would not run continuously at this flow rate; in those cases, a flow rate between 4.0 and 5.0 Lpm was used. The calibrator was used to check the flow rate after sampling, and the average flow rate was used for calculating the sample volume. Field sampling forms are attached.

Sample collection started on February 20. With the exception of 403 Park Street, two samples were collected from each residence, as specified in the Scope of Work dated November 20, 2012. A sample was not collected from the basement of 403 Park Street, based on The Johnson Company's understanding that EPA or its contractor recently collected a sample from this location. Photographs of all sample locations are attached.

Samples were placed in a cooler on ice and submitted to Pace Analytical for analysis of PCBs by EPA Method 1668A. PCBs were analyzed as congeners, and summed by the laboratory to provide a concentration of PCB homologs and total PCBs. Laboratory results are attached.

The sample volume was determined by multiplying the sampling duration by the average of the pre- and post-collection flow rates. The average flow rate was corrected for standard conditions using the average temperature over the sampling period for each space. An average barometric pressure for the sampling period was obtained from a weather station approximately 0.5 miles south of the homes sampled (KVTBENNI4).

RESULTS

Analytical results are presented in Tables 1 and 2. Table 1 summarizes the total PCB concentration in air (in nanograms per cubic meter; ng/m^3) for each sample and Table 2 shows the calculations for the 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalents (TEQs) for the twelve "dioxin-like" PCBs. The total 2,3,7,8-TCDD TEQ, which is compared to the 2,3,7,8-TCDD Hazardous Ambient Air Standard (HAAS), was developed to facilitate risk assessment. Table 3 is a summary of the TEQ values compared to the HAAS.

The Table 1 results indicate that the total PCB concentration is highest in the 406 Park Street Dining Room sample at 131 ng/m^3, this result is an order of magnitude greater than the other sample results. The lowest indoor concentrations, ranging from 4.3 to 4.9 ng/m^3 were measured in both sampled rooms at 410 Park Street and in the Living Room at 414 Park Street. The ambient air sample, collected outside 418 Park Street, contained the lowest total PCB concentration: 0.2 ng/m^3.

As shown in Table 2 and summarized in Table 3, of the 10 samples, 5 did not contain any dioxin-like congeners, 4 contained dioxin-like congeners but their total TEQs were below the HAAS, and 1 contained dioxin-like congeners that exceeded the HAAS of 0.023 pg/m^3. The sample from the 403 Park Street Living Room contained at TEQ of 0.026 pg/ m^3, which is above the HAAS. TEQs for the 414 Park Street Living Room and the 418 Park Street Kitchen were 0.006 pg/ m^3. The 406 Park Street Basement TEQ was slightly higher at 0.009 pg/ m^3. Although the highest total PCB concentration was measured at in the sample from the 406 Park Street Dining Room, its TEQ of 0.020 pg/ m^3 was below the HAAS.

To evaluate the potential for the presence of separate PCB sources in the houses, which could increase the total PCB concentrations detected in the air samples, each congener profile for the indoor samples was plotted in Figure 1. A congener profile is a plot that illustrates the percentage of each of 209 congeners present in the sample. Because PCBs are manufactured chemical products, each Aroclor has a signature congener profile, as shown in Figure 2. When PCBs are released to the environment, weathering and dechlorination can change the signature slightly; however, the profile of the peaks remains relatively consistent. As Figure 1 shows, the congener profiles for all of the air samples from both the basements and living areas are similar compared to other congener profiles provided in Figure 2. A comparison of Figures 1 and 2 indicates that the congener profiles in the houses are most similar to those for Aroclors 1016 and 1242, and dissimilar to Aroclors 1254 or 1260. The shape of the profiles also indicates that the lightest PCB congeners have migrated to the upper level of the houses, whereas the heavier congeners are present at higher percentages in the basement samples. However, as the TEQ calculations show, the relatively heavy congener 118 is present on both levels some houses.

Thank you for this opportunity to be of service to VT DEC. Please feel free to contact me if you have any questions or concerns regarding the work described in this letter.

Sincerely,
THE JOHNSON COMPANY, INC.

By: Rhonda Kay

Rhonda Kay, P.E.
Project Manager
E-mail: rtk@jcomail.com

Attachments

K:\3-2218-5\Air Sampling Jan-Feb 2013\February 2013 Sampling letter report\032213 Jard February Air Sampling Letter Report.docx

PHOTOGRAPHS

403 Park Street

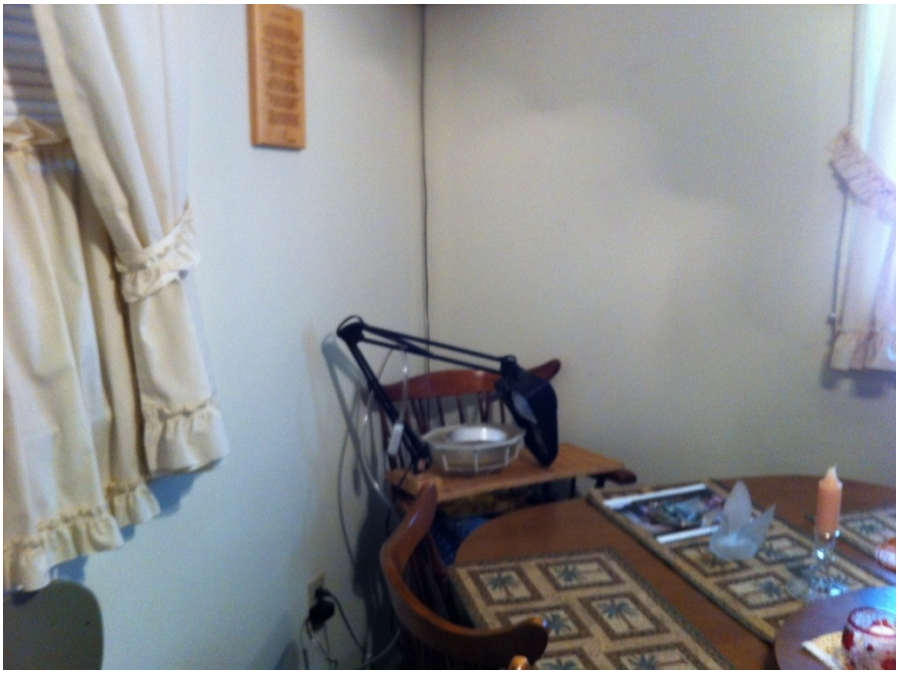
Sample ID: 403 Living Room

Note: Sample located in living room based on July 2012 air sampling results provided by VT DEC, in which the total PCB concentration in the living room was the greatest of first-floor samples.

406 Park Street

Sample ID: 406 Basement

Sample ID: 406 Dining Room



Note: Basement access is adjacent to dining room.

410 Park Street

Sample ID: 410 Basement

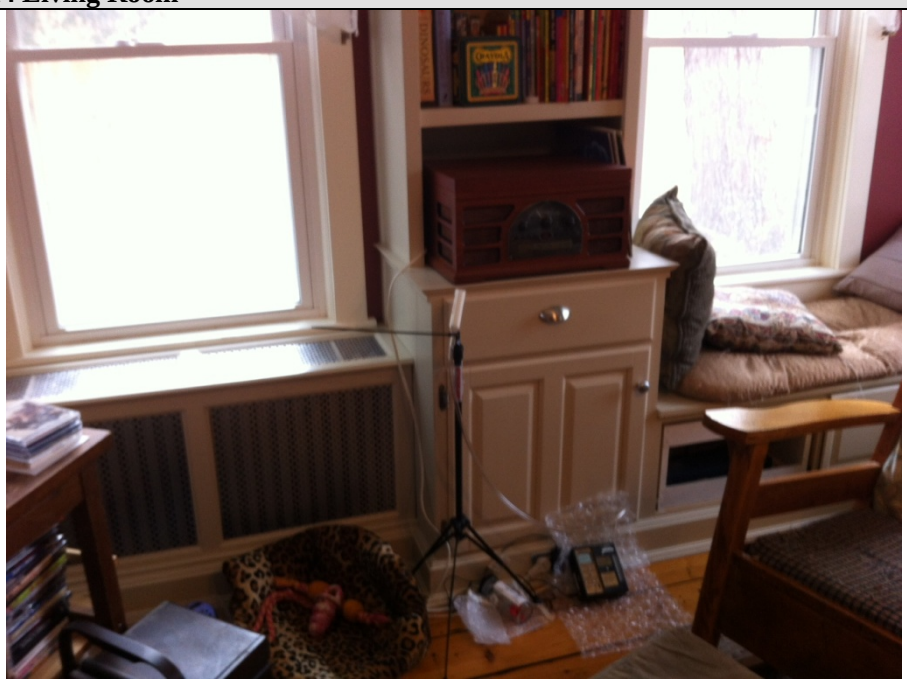
Sample ID: 410 Living Room

Note: Former basement access is in closet adjacent to sampler.

414 Park Street

Sample ID: 414 Basement

Sample ID: 414 Living Room



Notes: Basement access is through living room

418 Park Street

Sample ID: 418 Basement

Sample ID: 418 Kitchen

418 Park Street (Outdoor Air)

Sample ID: 418 Outdoor

TABLES

Table 1. Park Street Air Sampling Results Summary
February 20-21, 2013

The Johnson Company

Sample	Date and Time		Sampling Time (minutes)	Notes
	Start	Stop		
403 Living Room	2/20/2013 11:22	2/21/2013 11:18	1436	
406 Basement	2/20/2013 12:39	2/21/2013 12:44	1445	
406 Dining Room	2/20/2013 12:40	2/21/2013 12:43	1443	
410 Basement	2/20/2013 13:15	2/21/2013 13:14	1439	
410 Living Room	2/20/2013 13:30	2/21/2013 13:23	1433	
414 Basement	2/20/2013 9:19	2/21/2013 9:21	1442	Could not increase flow rate above 4.3 L/min
414 Living Room	2/20/2013 9:22	2/21/2013 9:20	1438	
418 Basement	2/20/2013 10:43	2/21/2013 10:42	1439	
418 Kitchen	2/20/2013 10:36	2/21/2013 10:28	1432	
418 Outdoor	2/20/2013 10:39	2/21/2013 10:34	1435	

Sample	Flow Rate (Lpm)			Average Barometric Pressure (in Hg)	Temperature (°F)	Average Flow Rate (Lpm @ STP)	Total PCB Mass in PUF (ng)	Calculated PCB Concentration in Air* (ng/m³)
	Pre-sample	Post-Sample	Average					
403 Living Room	4.05	3.86	3.96	29.9	70	3.9	193	34.5
406 Basement	4.01	3.8	3.91	29.9	55	3.7	187	34.7
406 Dining Room	4.11	3.5	3.81	29.9	73	3.8	713	131.0
410 Basement	4.22	3.79	4.01	29.9	53	3.8	24.4	4.4
410 Living Room	4.07	4.13	4.10	29.9	66	4.0	24.9	4.3
414 Basement	4.32	3.79	4.06	29.9	45	3.8	99.6	18.2
414 Living Room	5.01	4.74	4.88	29.9	68	4.8	33.9	4.9
418 Basement	4.98	4.91	4.95	29.9	62	4.8	72	10.4
418 Kitchen	5.02	4.91	4.97	29.9	74	4.9	105	14.9
418 Outdoor	4.7	4.8	4.75	29.9	26	4.3	1.43	0.2
						Trip Blank	0.14	
						Method Blank	0.218	

*Concentration of PCBs in air = [PCB result / (Average flow rate * Sampling time)] * 1000 liters per m^3

Table 2. Park Street Air Sampling Results - PCB Congeners
February 20-21, 2013

The Johnson Company

Congener IUPAC#	403 Living Room						406 Basement					
	Result			TEF	TEQ	TEQ	Result			TEF	TEQ	TEQ
	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)
77	---	ND	0.000	0.0001	0.0	0.0	EMPC	0.066	0.012	0.0001	1.22E-06	0.001
81	EMPC	0.0219	0.004	0.0003	1.17E-06	0.001	---	0.0239	0.004	0.0003	1.33E-06	0.001
105	---	1.12	0.200	0.00003	6.01E-06	0.006	---	0.25	0.046	0.00003	1.39E-06	0.001
114	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
118	---	3.23	0.578	0.00003	1.73E-05	0.017	---	0.804	0.149	0.00003	4.47E-06	0.004
123	EMPC	0.0632	0.011	0.00003	3.39E-07	0.000	EMPC	0.0212	0.004	0.00003	1.18E-07	0.000
126	---	ND	0.000	0.1	0.00E+00	0.000	---	ND	0.000	0.1	0.00E+00	0.000
156 + 157	---	0.212	0.038	0.00003	1.14E-06	0.001	---	ND	0.000	0.00003	0.00E+00	0.000
167	---	0.0823	0.015	0.00003	4.41E-07	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
169	---	ND	0.000	0.03	0.00E+00	0.000	---	ND	0.000	0.03	0.00E+00	0.000
189	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
Total (ng/m^3)			0.846						0.216			
Total TEQ (pg/m^3)						**0.026**						0.009

1) Reported concentrations are in parts per billion (ng/m^3).

2) EMPC = Estimated Maximum Possible Concentration

3) J = Estimated Value

4) TEF = Toxic Equivalency Factor determined by World Health Organization (2005).

5) TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent (concentration * TEF)

6) HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD = 0.023 pg/m3

7) PCB congeners identified according to International Union of Pure and Applied Chemistry numbering system.

8) PCB congeners 156 and 157 co-elute; combined concentration reported.

9) Black cell, white text indicates TEQ exceeds HAAS

10) If the concentration was reported as not detected (ND), a 0.0 is shown for the concentration for calculation purposes

Table 2. Park Street Air Sampling Results - PCB Congeners
February 20-21, 2013

Congener IUPAC#	406 Dining Room						410 Basement					
	Result			TEF	TEQ	TEQ	Result			TEF	TEQ	TEQ
	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)
77	---	0.305	0.056	0.0001	5.60E-06	0.006	---	ND	0.000	0.0001	0.00E+00	0.000
81	---	0.0465	0.009	0.0003	2.56E-06	0.003	---	ND	0.000	0.0003	0.00E+00	0.000
105	---	0.499	0.092	0.00003	2.75E-06	0.003	---	ND	0.000	0.00003	0.00E+00	0.000
114	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
118	---	1.5	0.276	0.00003	8.27E-06	0.008	---	ND	0.000	0.00003	0.00E+00	0.000
123	---	0.0464	0.009	0.00003	2.56E-07	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
126	---	ND	0.000	0.1	0.00E+00	0.000	---	ND	0.000	0.1	0.00E+00	0.000
156 + 157	---	0.0482	0.009	0.00003	2.66E-07	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
167	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
169	---	ND	0.000	0.03	0.00E+00	0.000	---	ND	0.000	0.03	0.00E+00	0.000
189	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
Total (ng/m^3)			0.449						0.000			
Total TEQ (pg/m^3)						0.020						0.000

1) Reported concentrations are in parts per billion (ng/m^3).

2) EMPC = Estimated Maximum Possible Concentration

3) J = Estimated Value

4) TEF = Toxic Equivalency Factor determined by World Health Organization (2005).

5) TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent (concentration * TEF)

6) HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD =

7) PCB congeners identified according to International Union of Pure and Applied Chemistry numbering system.

8) PCB congeners 156 and 157 co-elute; combined concentration reported.

9) Black cell, white text indicates TEQ exceeds HAAS

10) If the concentration was reported as not detected (ND), a 0.0 is shown for the concentration for calculation purposes

Table 2. Park Street Air Sampling Results - PCB Congeners
February 20-21, 2013

Congener IUPAC#	410 Living Room						414 Basement					
	Result			TEF	TEQ	TEQ	Result			TEF	TEQ	TEQ
	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)
77	---	ND	0.000	0.0001	0.00E+00	0.000	---	ND	0.000	0.0001	0.0	0.0
81	---	ND	0.000	0.0003	0.00E+00	0.000	---	ND	0.000	0.0003	0.0	0.0
105	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
114	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
118	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
123	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
126	---	ND	0.000	0.1	0.00E+00	0.000	---	ND	0.000	0.1	0.0	0.0
156 + 157	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
167	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
169	---	ND	0.000	0.03	0.00E+00	0.000	---	ND	0.000	0.03	0.0	0.0
189	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.0	0.0
Total (ng/m^3)			0.000						0.0			
Total TEQ (pg/m^3)						0.000						0.0

1) Reported c 1) Reported concentrations are in parts per billion (ng/m^3).

2) EMPC = E 2) EMPC = Estimated Maximum Possible Concentration

3) J = Estimat 3) J = Estimated Value

4) TEF = Tox 4) TEF = Toxic Equivalency Factor determined by World Health Organization (2005).

5) TEQ = 2,3, 5) TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent (concentration * TEF)

6) HAAS = H 6) HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD =

7) PCB conge 7) PCB congeners identified according to International Union of Pure and Applied Chemistry numbering system.

8) PCB conge 8) PCB congeners 156 and 157 co-elute; combined concentration reported.

9) Black cell, 9) Black cell, white text indicates TEQ exceeds HAAS

10) If the con 10) If the concentration was reported as not detected (ND), a 0.0 is shown for the concentration for calculation purposes

Table 2. Park Street Air Sampling Results - PCB Congeners
February 20-21, 2013

Congener IUPAC#	414 Living Room						418 Basement					
	Result			TEF	TEQ	TEQ	Result			TEF	TEQ	TEQ
	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)
77	---	ND	0.000	0.0001	0.0	0.0	---	ND	0.000	0.0001	0.0	0.0
81	---	ND	0.000	0.0003	0.00E+00	0.000	---	ND	0.000	0.0003	0.00E+00	0.000
105	---	0.2	0.034	0.00003	1.03E-06	0.001	---	ND	0.000	0.00003	0.00E+00	0.000
114	EMPC	0.0137	0.002	0.00003	5.97E-08	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
118	---	0.648	0.094	0.00003	2.83E-06	0.003	---	ND	0.000	0.00003	0.00E+00	0.000
123	J	0.0129	0.002	0.00003	5.62E-08	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
126	---	ND	0.000	0.1	0.00E+00	0.000	---	ND	0.000	0.1	0.00E+00	0.000
156 + 157	---	0.4	0.058	0.00003	1.75E-06	0.002	---	ND	0.000	0.00003	0.00E+00	0.000
167	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
169	---	ND	0.000	0.03	0.00E+00	0.000	---	ND	0.000	0.03	0.00E+00	0.000
189	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
Total (ng/m^3)			0.191						0.000			
Total TEQ (pg/m^3)						0.006						0.000

1) Reported concentrations are in parts per billion (ng/m^3).

2) EMPC = Estimated Maximum Possible Concentration

3) J = Estimated Value

4) TEF = Toxic Equivalency Factor determined by World Health Organization (2005).

5) TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent (concentration * TEF)

6) HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD =

7) PCB congeners identified according to International Union of Pure and Applied Chemistry numbering system.

8) PCB congeners 156 and 157 co-elute; combined concentration reported.

9) Black cell, white text indicates TEQ exceeds HAAS

10) If the concentration was reported as not detected (ND), a 0.0 is shown for the concentration for calculation purposes

Table 2. Park Street Air Sampling Results - PCB Congeners
February 20-21, 2013

Congener IUPAC#	418 Kitchen						418 Outdoor					
	Result			TEF	TEQ	TEQ	Result			TEF	TEQ	TEQ
	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)	Qualifier	(ng)	(ng/m^3)	-	(ng/m^3)	(pg/m^3)
77	---	ND	0.000	0.0001	0.0	0.0	---	ND	0.000	0.0001	0.0	0.0
81	---	ND	0.000	0.0003	0.00E+00	0.000	---	ND	0.000	0.0003	0.00E+00	0.000
105	---	0.29	0.041	0.00003	1.23E-06	0.001	---	ND	0.000	0.00003	0.00E+00	0.000
114	---	0.0301	0.004	0.00003	1.28E-07	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
118	---	1.12	0.159	0.00003	4.76E-06	0.005	---	ND	0.000	0.00003	0.00E+00	0.000
123	J	0.0189	0.003	0.00003	8.03E-08	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
126	---	ND	0.000	0.1	0.00E+00	0.000	---	ND	0.000	0.1	0.00E+00	0.000
156 + 157	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
167	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
169	---	ND	0.000	0.03	0.00E+00	0.000	---	ND	0.000	0.03	0.00E+00	0.000
189	---	ND	0.000	0.00003	0.00E+00	0.000	---	ND	0.000	0.00003	0.00E+00	0.000
Total (ng/m^3)			0.207						0.000			
Total TEQ (pg/m^3)						0.006						0.000

1) Reported concentrations are in parts per billion (ng/m^3).

2) EMPC = Estimated Maximum Possible Concentration

3) J = Estimated Value

4) TEF = Toxic Equivalency Factor determined by World Health Organization (2005).

5) TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent (concentration * TEF)

6) HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD =

7) PCB congeners identified according to International Union of Pure and Applied Chemistry numbering system.

8) PCB congeners 156 and 157 co-elute; combined concentration reported.

9) Black cell, white text indicates TEQ exceeds HAAS

10) If the concentration was reported as not detected (ND), a 0.0 is shown for the concentration for calculation purposes

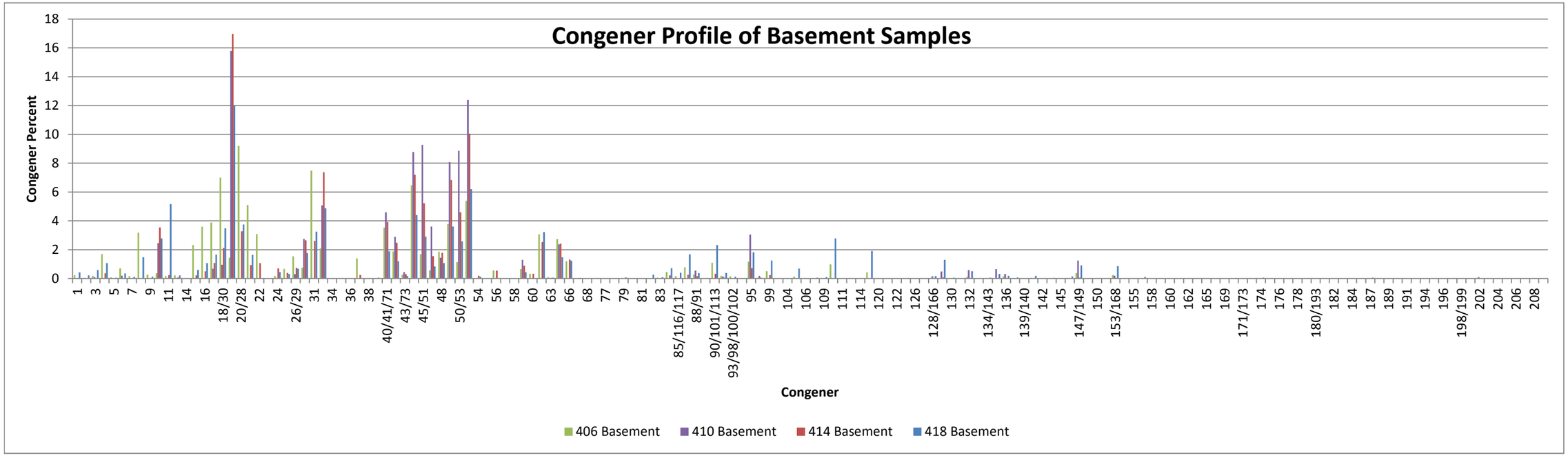
Table 3. Park Street Air Sampling Results- PCB TEQ vs HAAS Summary
February 20-21, 2013

HAAS = 0.023 pg/m^3

Sample ID	Total TEQ (pg/m^3)
403 Living Room	**0.026**
406 Basement	0.009
406 Dining Room	0.020
410 Basement	0.000
410 Living Room	0.000
414 Basement	0.000
414 Living Room	0.006
418 Kitchen	0.006
418 Outdoor	0.000
418 Basement	0.000

Notes:
TEQ = 2,3,7,8-tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD) Toxic Equivalent
HAAS = Hazardous Ambient Air Standard for 2,3,7,8-TCDD

FIGURES



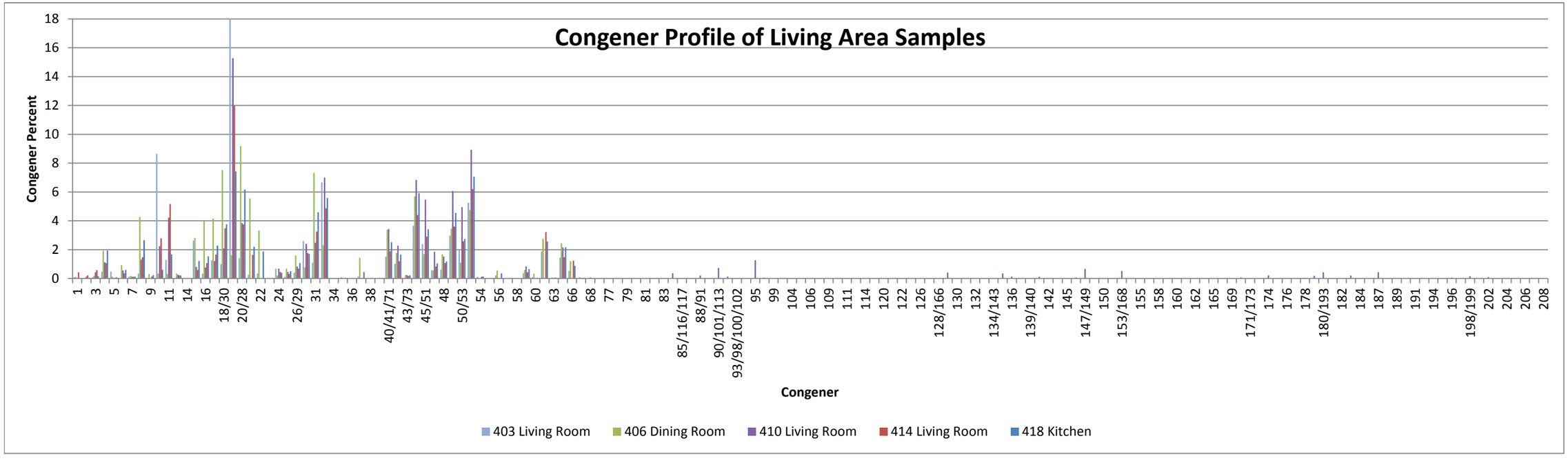


Figure 1. Congener Profiles of Basement and Living Area Samples (Outdoor Sample not shown)

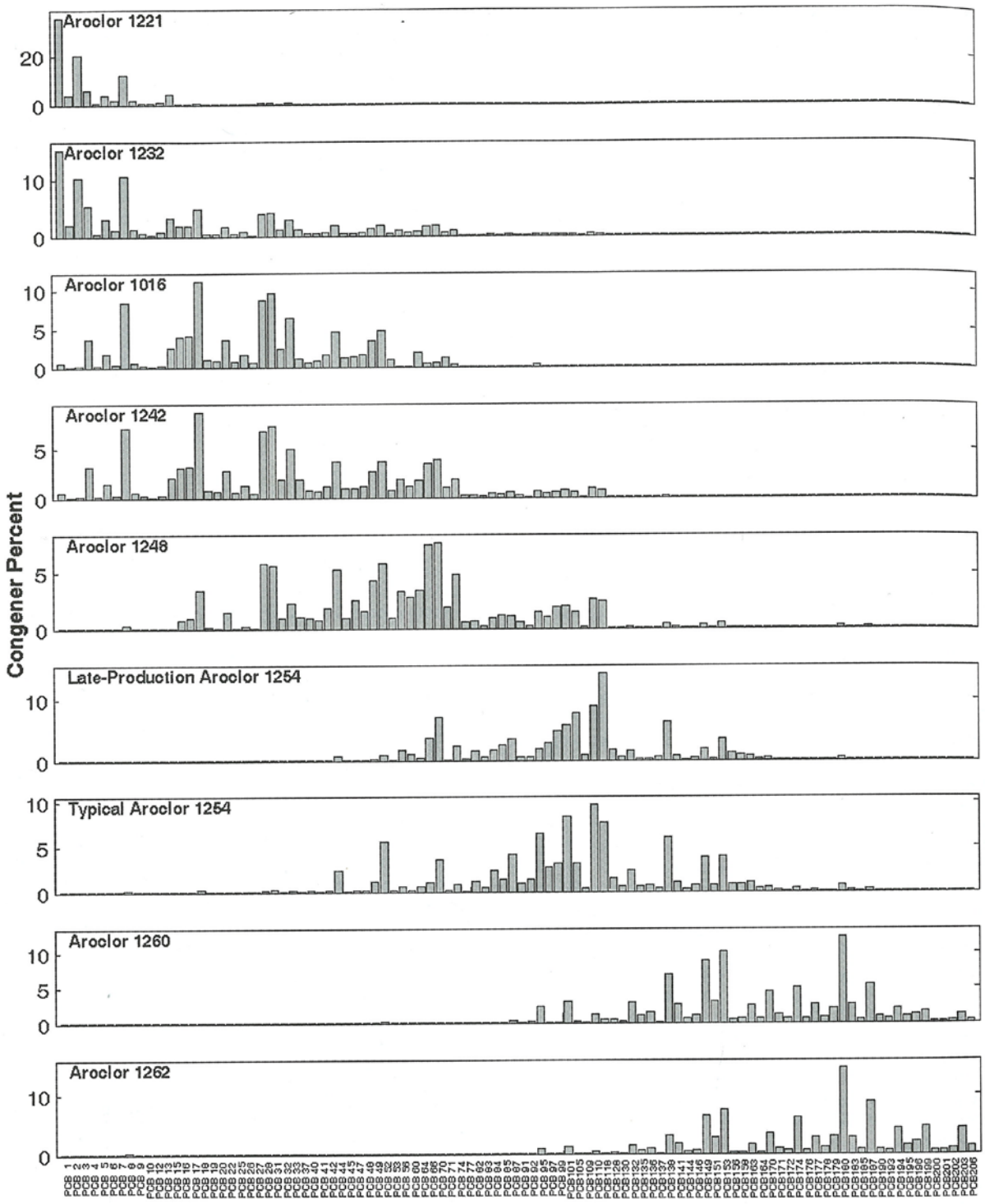


Figure 2. Congener profiles of Aroclor mixtures (Figure 10.1.2 from Environmental Forensics by R.D. Morrison and B.L. Murphy, 2006)

LABORATORY REPORTS

Pace Analytical e-Report

Report prepared for:
THE JOHNSON COMPANY, INC
100 STATE ST
SUITE 600
MONTPELIER, VT 05602
CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT
Sampling Date(s): February 21, 2013
Lab Report ID: 13020166
Client Service Contact: Chelsea Farmer (518) 346-4592

Analysis Included:
Method 1668 - Subcontracted

Dan Pfalzer
Laboratory Director

Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), VA (1884)

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Table of Contents

CASE NARRATIVE

March 13, 2013

CASE NARRATIVE

This data package (SDG ID: 13020166) consists of 11 polyurethane foam samples received on 2/22/2013. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

Lab Sample ID	Client ID	Collection Date
AQ02478	TRIP BLANK	2/21/2013
AQ02479	414 BASEMENT	2/21/2013 09:21
AQ02480	414 LIVING ROOM	2/21/2013 09:20
AQ02481	418 KITCHEN	2/21/2013 10:28
AQ02482	418 OUTDOOR	2/21/2013 10:34
AQ02483	418 BASEMENT	2/21/2013 10:42
AQ02484	403 LIVING ROOM	2/21/2013 11:18
AQ02485	406 BASEMENT	2/21/2013 12:44
AQ02486	406 DINING ROOM	2/21/2013 12:43
AQ02487	410 BASEMENT	2/21/2013 13:14
AQ02488	410 LIVING ROOM	2/21/2013 13:23

Sample Delivery and Receipt Conditions

(1.) All samples were delivered to the laboratory via UPS delivery service on 2/22/2013.

(2.) All samples were received at the laboratory intact and within holding times.

(3.) The following cooler temperature was recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 1.2 degrees Celsius. Please see Chain of Custody for details.

Subcontract Analysis

(1.) Please see the Pace-MN Lab report for Quality Assurance details.

Respectfully submitted,

Chelsea L. Farmer
Project Manager

QUALIFIERS

Organic Laboratory Qualifiers Defined

B - Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.

D - Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).

P - Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.

U - Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.

Z - Chromatographic interference due to PCB co-elution.

* - Value not within control limits.

Inorganic Laboratory Qualifiers Defined

B - Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.

E - Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.

J - Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).

U - Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.

* - Value not within control limits.

SAMPLE CHAIN OF CUSTODY

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

<13020166P1>

130201661

Page: 1 of 1

1590165

Section A Required Client Information:

Company: The Johnson Company
Address: 100 State St. Suite 600 Montpelier, VT 05602
Email To: RTKCJCOMAIL.COM
Phone: 802-229-4600 Fax: 802-2295176
Requested Due Date/TAT: Std TAT

Section B Required Project Information:

Report To: Rhonda Kay
Copy To:
Purchase Order No.: 3-2218-5 (045)
Project Name: JARD
Project Number: 3-2218-5

Section C Invoice Information:

Attention: Rhonda Kay
Company Name: The Johnson Company
Address: 100 State St. Suite 600, Montpelier VT
Pace Quote Reference: Bill Kotas email
Pace Project Manager: Chelsea Farmer
Pace Profile #:

ENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: VT

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	PCBs by 1668A	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Trip Blank	AR						✓	1	X								N			AQ02478
2	414 Basement	AR	C	2/20/13	0919	2/21/13	0921		1	X								Y	X		AQ02479
3	414 Living Room	AR	C	2/20/13	0922	2/21/13	0920		1	X								Y	X		AQ02480
4	418 Kitchen	AR	C	2/20/13	1036	2/21/13	1025		1	X								Y	X		AQ02481
5	418 Outdoor	AR	C	2/20/13	1039	2/21/13	1034		1	X								Y	X		AQ02482
6	418 Basement	AR	C	2/20/13	1043	2/21/13	1042		1	X								Y	X		AQ02483
7	403 Living Room	AR	C	2/20/13	1122	2/21/13	1118		1	X								Y	X		AQ02484
8	406 Basement	AR	C	2/20/13	1235	2/21/13	1244		1	X								Y	X		AQ02485
9	406 Dining Room	AR	C	2/20/13	1240	2/21/13	1243		1	X								Y	X		AQ02486
10	410 Basement	AR	C	2/20/13	1315	2/21/13	1314		1	X								Y	X		AQ02487
11	410 Living Room	AR	C	2/20/13	1330	2/21/13	1323		1	X								Y	X		AQ02488
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	[signature]	2/21/13	1400	UPS	2/21/13	14:00
	UPS	2/22/13	10:31	Angela Cowen	2/22/13	10:31

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.2	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Daniel Baston

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 02/20/13

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 [illegible]

Subcontract Analysis

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

www.pacelabs.com

Report Prepared for:

Chelsea Farmer
Pace Analytical
2190 Technology Drive
Schenectady NY 12308

REPORT OF LABORATORY ANALYSIS FOR PCBs

Report Information:

Pace Project #: 10220944
Sample Receipt Date: 02/23/2013
Client Project #: 13020166 TCJ
Client Sub PO #: N/A
State Cert #: N/A

4

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCB Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Scott Unze, your Pace Project Manager.

This report has been reviewed by:

March 12, 2013

Scott Unze, Project Manager
(612) 607-6383
(612) 607-6444 (fax)
scott.unze@pacelabs.com

Report Prepared Date:
March 12, 2013

ACCREDITED IN ACCORDANCE WITH nelac

Report of Laboratory Analysis

The results relate only to the samples included in this report.

Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
Phone: 612.607.1700
Fax: 612.607.6444

DISCUSSION

This report presents the results from the analyses performed on eleven samples submitted by a representative of Pace Analytical - New York. The samples were analyzed for the presence or absence of polychlorobiphenyls (PCBs) using a modified version of USEPA Method 1668C. Reporting limits were set to correspond to the levels determined by a limit of quantitation study. Levels below the calibration range were flagged "J" as estimated values.

The recoveries of the isotopically-labeled PCB internal standards in the sample extracts ranged from 9-123%. With one exception, flagged "R" on the LCS table, the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1668C. Since the quantification of the native congeners was based on isotope dilution and internal standard methodology, the data were automatically corrected for variation in recovery and accurate values were obtained.

Incorrect isotope ratios were obtained for selected PCB congeners. The affected congeners were flagged "I" on the results tables. Any associated target analyte detections were provided under the estimated maximum possible concentration (EMPC) column on the results tables.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to contain low levels of two native PCB congeners. In some cases, the sample extracts were found to contain similar levels of these congeners and were flagged "B" on the results tables. In general, levels less than ten times the background are not considered statistically different from the background.

Laboratory spike samples were also prepared with the sample batch using clean PUFs that had been fortified with native standards. The results show that the spiked native compounds were recovered at 92-122%, with relative percent differences of 0.0-12.1%. These values were within method limits. Matrix spikes were not extracted with this sample batch.

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
Alabama	40770	Montana	92
Alaska	MN00064	Nebraska	
Arizona	AZ0014	Nevada	MN_00064_200
Arkansas	88-0680	New Jersey (NE	MN002
California	01155CA	New Mexico	MN00064
Colorado	MN00064	New York (NEL	11647
Connecticut	PH-0256	North Carolina	27700
EPA Region 5	WD-15J	North Dakota	R-036
EPA Region 8	8TMS-Q	Ohio	4150
Florida (NELAP	E87605	Ohio VAP	CL101 9507
Georgia (DNR)	959	Oklahoma	D9922
Guam	959	Oregon (ELAP)	MN200001-005
Hawaii	SLD	Oregon (OREL	MN300001-001
Idaho	MN00064	Pennsylvania	68-00563
Illinois	200012	Saipan	MP0003
Indiana	C-MN-01	South Carolina	74003001
Indiana	C-MN-01	Tennesee	2818
Iowa	368	Tennessee	02818
Kansas	E-10167	Texas	T104704192-08
Kentucky	90062	Utah (NELAP)	PAM
Louisiana	03086	Virginia	00251
Maine	2007029	Washington	C755
Maryland	322	West Virginia	9952C
Michigan	9909	Wisconsin	999407970
Minnesota	027-053-137	Wyoming	8TMS-Q
Mississippi	MN00064		

REPORT OF LABORATORY ANALYSIS

Appendix A

4

Sample Management

Report No.: 10220944_1668C

Pace Analytical Services, Inc.

13020166

10220944

HRS Reference #69

CHAIN OF CUSTODY RECORD

PAGE 1 OF 2

Pace Analytical Services, Inc.

2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 13020166
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)

- ○ RETURN TO CLIENT
- ● DISPOSAL BY RECEIVING LAB
- ○ ARCHIVAL BY RECEIVING LAB

Additional charges incurred for disposal (if hazardous) or archival.
Call for details.

CLIENT (REPORTS TO BE SENT TO): PACE	PROJECT#/PROJECT NAME: 13020166
PROJECT MANAGER: Chelsea Farmer	LOCATION (CITY/STATE) ADDRESS: VT
SAMPLED BY: (Please Print)	REQUIRED TURN AROUND TIME: 3/15/2013
SAMPLING FIRM:	NAME OF COURIER (IF USED):
ELECTRONIC RESULTS	CHELSEAF@NEALAB.COM
FAXED RESULTS	FAX #:

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE CODE:
BOTTLE TYPE:
BOTTLE SIZE:

PRESERVATIVE KEY
0 - ICE
1 - HCL
2 - HNO3
3 - H2SO4
4 - NaOH
5 - Zn. Acetate
6 - MeOH
7 - NaHSO4
8 - Other (Na2SO3)

SAMPLE ID	DATE	TIME	MATRIX	GRAB/ COMP	LAB SAMPLE ID (LAB USE ONLY)	NUMBER OF CONTAINERS	PCBs by 1668							REMARKS:
TRIP BLANK	2/21/13		PF10	GRAB	AQ02478	1	X							
414 BASEMENT	2/21/13	9:21	PF10	COMP	AQ02479	1	X							
414 LIVING ROOM	2/21/13	9:20	PF10	COMP	AQ02480	1	X							
418 KITCHEN	2/21/13	10:28	PF10	COMP	AQ02481	1	X							
418 OUTDOOR	2/21/13	10:34	PF10	COMP	AQ02482	1	X							
418 BASEMENT	2/21/13	10:42	PF10	COMP	AQ02483	1	X							
403 LIVING ROOM	2/21/13	11:18	PF10	COMP	AQ02484	1	X							
406 BASEMENT	2/21/13	12:44	PF10	COMP	AQ02485	1	X							
406 DINING ROOM	2/21/13	12:43	PF10	COMP	AQ02486	1	X							
410 BASEMENT	2/21/13	13:14	PF10	COMP	AQ02487	1	X							

AMBIENT OR CHILLED: TEMP: 3.4
RECEIVED BROKEN OR LEAKING: Y (N)
COC TAPE: Y N
COC DISCREPANCIES: Y N
PROPERLY PRESERVED: Y N
RECVD W/I HOLDING TIMES: Y N
OTHER NOTES:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE [signature]	SIGNATURE Fedex	SIGNATURE	SIGNATURE	SIGNATURE	SIGNATURE
PRINTED NAME Angela Cowles	PRINTED NAME Lakeisha Christopher	PRINTED NAME	PRINTED NAME	PRINTED NAME	PRINTED NAME
COMPANY PACE	COMPANY PACE	COMPANY	COMPANY	COMPANY	COMPANY
DATE/TIME 2/22/13	DATE/TIME 2/23/13 0930	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME

S:\LOGIN\MDLCOCS

HRS Reference #69

CHAIN OF CUSTODY RECORD

PAGE 2 OF 2

Pace Analytical Services, Inc.
2190 Technology Drive, Schenectady, NY 12308
Telephone (518) 346-4592 Fax (518) 381-6055
www.pacelabs.com

LRF # 13020166
(LAB USE ONLY)

DISPOSAL REQUIREMENTS: (To be filled in by Client)
○ RETURN TO CLIENT
● DISPOSAL BY RECEIVING LAB
○ ARCHIVAL BY RECEIVING LAB
Additional charges incurred for disposal (if hazardous) or archival.
Call for details.

CLIENT (REPORTS TO BE SENT TO):	PROJECT#/PROJECT NAME:
PACE	13020166
PROJECT MANAGER:	LOCATION (CITY/STATE) ADDRESS:
Chelsea Farmer	VT
SAMPLED BY: (Please Print)	REQUIRED TURN AROUND TIME: 3/15/2013
SAMPLING FIRM:	NAME OF COURIER (IF USED):
ELECTRONIC RESULTS: CHELSEAF@NEALAB.COM	
FAXED RESULTS: FAX #:	

ENTER ANALYSIS AND METHOD NUMBER REQUESTED

PRESERVATIVE CODE:
BOTTLE TYPE:
BOTTLE SIZE:

PRESERVATIVE KEY
0 - ICE
1 - HCL
2 - HNO3
3 - H2SO4
4 - NaOH
5 - Zn. Acetate
6 - MeOH
7 - NaHSO4
8 - Other (Na2SO3)

SAMPLE ID	DATE	TIME	MATRIX	GRAB/ COMP	LAB SAMPLE ID (LAB USE ONLY)	NUMBER OF CONTAINERS	PCBs by 1668	REMARKS:
410 LIVING ROOM	2/21/13	13:23	PF10	COMP	AQ02488	1	X	

AMBIENT OR CHILLED: 2hr ice TEMP: 3.4
RECEIVED BROKEN OR LEAKING: N
COC TAPE: Y N
COC DISCREPANCIES: Y N
PROPERLY PRESERVED: Y N
RECVD W/I HOLDING TIMES: Y N
OTHER NOTES:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
SIGNATURE: Angela Cowles	SIGNATURE: Fedex	SIGNATURE:	SIGNATURE:	SIGNATURE:	SIGNATURE:
PRINTED NAME: Angela Cowles	PRINTED NAME: Lakesha Christopher	PRINTED NAME:	PRINTED NAME:	PRINTED NAME:	PRINTED NAME:
COMPANY: PACE	COMPANY: PACE	COMPANY:	COMPANY:	COMPANY:	COMPANY:
DATE/TIME: 2/22/13	DATE/TIME: 2/23/13 0930	DATE/TIME:	DATE/TIME:	DATE/TIME:	DATE/TIME:

S:\LOGIN\MDLCOCS

Pace Analytical	Document Name: Sample Condition Upon Receipt Form	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-L-213-rev.06	Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt

Client Name: Pace NY

Project #: WO# : 10220944

10220944

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 478616169 6342

Custody Seal on Cooler/Box Present? ☒ Yes ☐ No **Seals Intact?** ☒ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other: **Temp Blank?** ☒ Yes ☐ No

Thermom. Used: ☐ B88A912167504 ☐ 80512447 ☒ 72337080 **Type of Ice:** ☒ Wet ☐ Blue ☐ None ☐ Samples on ice, cooling process has begun

Cooler Temp Read (°C): 3.4 **Cooler Temp Corrected (°C):** 3.4 **Biological Tissue Frozen?** ☐ Yes ☐ No

Temp should be above freezing to 6°C **Correction Factor:** true **Date and Initials of Person Examining Contents:** 2/23/13 LC

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☐ Yes	☒ No	☐ N/A	7.
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☐ Yes	☒ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Filtered Volume Received for Dissolved Tests?	☐ Yes	☐ No	☒ N/A	11.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: SL	☒ Yes	☐ No	☐ N/A	12.
All containers needing acid/base preservation have been checked? Noncompliances are noted in 13.	☐ Yes	☐ No	☒ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO_3, H_2SO_4, HCl<2; NaOH>12)	☐ Yes	☐ No	☒ N/A	Sample #
Exceptions: VOA, Coliform, TOC, Oil and Grease, WI-DRO (water)	☐ Yes	☒ No		Initial when completed: Lot # of added preservative:
Headspace in VOA Vials (>6mm)?	☐ Yes	☐ No	☒ N/A	14.
Trip Blank Present?	☐ Yes	☐ No	☒ N/A	15.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☒ N/A	
Pace Trip Blank Lot # (if purchased):				

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: (W) **Date:** 02/26/13

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Reporting Flags

A = Reporting Limit based on signal to noise

B = Less than 10x higher than method blank level

C = Result obtained from confirmation analysis

D = Result obtained from analysis of diluted sample

E = Exceeds calibration range

I = Interference present

J = Estimated value

Nn = Value obtained from additional analysis

P = PCDE Interference

R = Recovery outside target range

S = Peak saturated

U = Analyte not detected

V = Result verified by confirmation analysis

X = %D Exceeds limits

Y = Calculated using average of daily RFs

* = See Discussion

Appendix B

4

Sample Analysis Summary

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	Trip Blank AQ02478		
Lab Sample ID	10220944001		
Filename	P130305B_11		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013
ICAL ID	P130305B02	Received	02/23/2013 09:30
CCal Filename(s)	P130305B_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 08:50

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.479	3.38	2.0	0.458	23
13C-4-MoCB	3	11.858	3.50	2.0	0.715	36
13C-2,2'-DiCB	4	12.194	1.72	2.0	0.631	32
13C-4,4'-DiCB	15	20.451	1.60	2.0	0.735	37
13C-2,2',6-TrCB	19	16.664	1.07	2.0	0.720	36
13C-3,4,4'-TrCB	37	29.091	1.09	2.0	1.03	52
13C-2,2',6,6'-TeCB	54	20.791	0.82	2.0	0.899	45
13C-3,4,4',5-TeCB	81	36.705	0.78	2.0	1.23	62
13C-3,3',4,4'-TeCB	77	37.325	0.77	2.0	1.34	67
13C-2,2',4,6,6'-PeCB	104	27.616	1.64	2.0	1.00	50
13C-2,3,3',4,4'-PeCB	105	41.115	1.62	2.0	1.35	68
13C-2,3,4,4',5-PeCB	114	40.428	1.59	2.0	1.36	68
13C-2,3',4,4',5-PeCB	118	39.875	1.62	2.0	1.42	71
13C-2,3',4,4',5'-PeCB	123	39.522	1.57	2.0	1.37	68
13C-3,3',4,4',5-PeCB	126	44.452	1.59	2.0	1.31	65
13C-2,2',4,4',6,6'-HxCB	155	34.173	1.27	2.0	1.24	62
13C-HxCB (156/157)	156/157	47.639	1.26	4.0	3.25	81
13C-2,3',4,4',5,5'-HxCB	167	46.448	1.28	2.0	1.60	80
13C-3,3',4,4',5,5'-HxCB	169	51.076	1.30	2.0	1.59	79
13C-2,2',3,4',5,6,6'-HpCB	188	40.428	1.06	2.0	0.954	48
13C-2,3,3',4,4',5,5'-HpCB	189	53.989	1.07	2.0	1.12	56
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.163	0.90	2.0	1.12	56
13C-2,3,3',4,4',5,5',6-OcCB	205	56.640	0.90	2.0	1.43	72
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.567	0.77	2.0	1.72	86
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.364	0.78	2.0	1.18	59
13C--DeCB	209	58.472	0.72	2.0	1.44	72
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.312	1.11	2.0	1.12	56
13C-2,3,3',5,5'-PeCB	111	37.409	1.64	2.0	1.30	65
13C-2,2',3,3',5,5',6-HpCB	178	43.715	1.04	2.0	1.63	81
Recovery Standards						
13C-2,5-DiCB	9	15.130	1.62	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.526	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.424	1.55	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.211	1.26	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.381	0.91	2.0	NA	NA

Conc = Concentration
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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID Trip Blank AQ02478
Lab Sample ID 10220944001
Filename P130305B_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		---	---	ND	---	0.0200
2		---	---	ND	---	0.0200
3		---	---	ND	---	0.0200
4		---	---	ND	---	0.100
5		---	---	ND	---	0.0200
6		---	---	ND	---	0.0200
7		---	---	ND	---	0.0200
8		---	---	ND	---	0.250
9		---	---	ND	---	0.0200
10		---	---	ND	---	0.0200
11		19.684	1.53	0.140 B	---	0.139
12	12/13	---	---	ND	---	0.0100
13	12/13	---	---	ND	---	0.0100
14		---	---	ND	---	0.0100
15		---	---	ND	---	0.132
16		---	---	ND	---	0.100
17		---	---	ND	---	0.100
18	18/30	---	---	ND	---	0.200
19		---	---	ND	---	0.0264
20	20/28	---	---	ND	---	0.516
21	21/33	---	---	ND	---	0.540
22		---	---	ND	---	0.380
23		---	---	ND	---	0.00500
24		---	---	ND	---	0.0200
25		---	---	ND	---	0.100
26	26/29	---	---	ND	---	0.0400
27		---	---	ND	---	0.0200
28	20/28	---	---	ND	---	0.516
29	26/29	---	---	ND	---	0.0400
30	18/30	---	---	ND	---	0.200
31		---	---	ND	---	0.520
32		---	---	ND	---	0.100
33	21/33	---	---	ND	---	0.540
34		---	---	ND	---	0.00500
35		---	---	ND	---	0.0200
36		---	---	ND	---	0.0100
37		---	---	ND	---	0.212
38		---	---	ND	---	0.0100
39		---	---	ND	---	0.0100
40	40/41/71	---	---	ND	---	0.120
41	40/41/71	---	---	ND	---	0.120
42		---	---	ND	---	0.200
43	43/73	---	---	ND	---	0.0200
44	44/47/65	---	---	ND	---	0.600
45	45/51	---	---	ND	---	0.0800
46		---	---	ND	---	0.0100
47	44/47/65	---	---	ND	---	0.600
48		---	---	ND	---	0.200

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Tel: 612-607-1700
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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID Trip Blank AQ02478
Lab Sample ID 10220944001
Filename P130305B_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	---	---	ND	---	0.400
50	50/53	---	---	ND	---	0.0200
51	45/51	---	---	ND	---	0.0800
52		---	---	ND	---	0.492
53	50/53	---	---	ND	---	0.0200
54		---	---	ND	---	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	---	---	ND	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	---	---	ND	---	0.0300
63		---	---	ND	---	0.0100
64		---	---	ND	---	0.200
65	44/47/65	---	---	ND	---	0.600
66		---	---	ND	---	0.336
67		---	---	ND	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	---	---	ND	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	---	---	ND	---	0.120
72		---	---	ND	---	0.0100
73	43/73	---	---	ND	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	---	---	ND	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		---	---	ND	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	---	---	ND	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	---	---	ND	---	0.120
91	88/91	---	---	ND	---	0.0200
92		---	---	ND	---	0.0100
93	93/98/100/102	---	---	ND	---	0.0400
94		---	---	ND	---	0.0200
95		---	---	ND	---	0.0760
96		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID Trip Blank AQ02478
Lab Sample ID 10220944001
Filename P130305B_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	---	---	ND	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	---	---	ND	---	0.0400
101	90/101/113	---	---	ND	---	0.120
102	93/98/100/102	---	---	ND	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	---	---	ND	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	---	---	ND	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		---	---	ND	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	---	---	ND	---	0.0200
136		---	---	ND	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	---	---	ND	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID Trip Blank AQ02478
Lab Sample ID 10220944001
Filename P130305B_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		---	---	ND	---	0.0100
147	147/149	---	---	ND	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	---	---	ND	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	---	---	ND	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	---	---	ND	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	---	---	ND	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	---	---	ND	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		---	---	ND	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		---	---	ND	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Tel: 612-607-1700
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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID	Trip Blank AQ02478
Lab Sample ID	10220944001
Filename	P130305B_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID	Trip Blank AQ02478
Lab Sample ID	10220944001
Filename	P130305B_11

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	ND
Total Dichloro Biphenyls	0.140
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	ND
Total Pentachloro Biphenyls	ND
Total Hexachloro Biphenyls	ND
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	0.140

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	414 Basement AQ02479		
Lab Sample ID	10220944002		
Filename	P130306A_04		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 09:21
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 14:17

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.491	3.42	2.0	0.486	24
13C-4-MoCB	3	11.858	3.30	2.0	0.646	32
13C-2,2'-DiCB	4	12.205	1.63	2.0	0.612	31
13C-4,4'-DiCB	15	20.472	1.61	2.0	0.656	33
13C-2,2',6-TrCB	19	16.674	1.10	2.0	0.655	33
13C-3,4,4'-TrCB	37	29.089	1.08	2.0	1.02	51
13C-2,2',6,6'-TeCB	54	20.805	0.80	2.0	0.840	42
13C-3,4,4',5-TeCB	81	36.736	0.77	2.0	1.08	54
13C-3,3',4,4'-TeCB	77	37.339	0.82	2.0	1.21	61
13C-2,2',4,6,6'-PeCB	104	27.647	1.62	2.0	1.03	51
13C-2,3,3',4,4'-PeCB	105	41.129	1.57	2.0	1.24	62
13C-2,3,4,4',5-PeCB	114	40.442	1.58	2.0	1.29	64
13C-2,3',4,4',5-PeCB	118	39.888	1.57	2.0	1.28	64
13C-2,3',4,4',5'-PeCB	123	39.536	1.61	2.0	1.26	63
13C-3,3',4,4',5-PeCB	126	44.466	1.59	2.0	1.18	59
13C-2,2',4,4',6,6'-HxCB	155	34.187	1.30	2.0	1.40	70
13C-HxCB (156/157)	156/157	47.670	1.28	4.0	3.03	76
13C-2,3',4,4',5,5'-HxCB	167	46.462	1.30	2.0	1.52	76
13C-3,3',4,4',5,5'-HxCB	169	51.108	1.24	2.0	1.43	71
13C-2,2',3,4',5,6,6'-HpCB	188	40.442	1.07	2.0	1.29	64
13C-2,3,3',4,4',5,5'-HpCB	189	54.009	1.04	2.0	1.21	61
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.177	0.92	2.0	1.37	68
13C-2,3,3',4,4',5,5',6-OcCB	205	56.660	0.88	2.0	1.50	75
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.587	0.81	2.0	1.80	90
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.384	0.79	2.0	1.37	68
13C--DeCB	209	58.492	0.71	2.0	1.59	79
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13C-2,4,4'-TrCB	28	24.310	1.09	2.0	1.01	51
13C-2,3,3',5,5'-PeCB	111	37.423	1.61	2.0	1.30	65
13C-2,2',3,3',5,5',6-HpCB	178	43.729	1.08	2.0	1.70	85
Recovery Standards						
13C-2,5-DiCB	9	15.140	1.37	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.540	0.79	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.438	1.63	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.225	1.28	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.380	0.90	2.0	NA	NA

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Basement AQ02479
Lab Sample ID 10220944002
Filename P130306A_04

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		8.515	2.89	0.0420		---	0.0200
2		---	---	ND		---	0.0200
3		11.882	4.31 I	---		0.0244	0.0200
4		12.229	1.41	0.370		---	0.100
5		---	---	ND		---	0.0200
6		15.739	1.56	0.0347		---	0.0200
7		---	---	ND		---	0.0200
8		---	---	ND		---	0.250
9		---	---	ND		---	0.0200
10		12.493	1.59	3.53		---	0.0200
11		19.693	1.62	0.237	B	---	0.139
12	12/13	20.088	1.40	0.0761		---	0.0100
13	12/13	20.088	1.40	(0.0761)		---	0.0100
14		---	---	ND		---	0.0100
15		20.484	1.46	0.221		---	0.132
16		20.400	1.08	0.499		---	0.100
17		19.825	1.06	1.08		---	0.100
18	18/30	19.274	1.05	2.11		---	0.200
19		16.698	1.08	16.9		---	0.0264
20	20/28	24.343	1.04	3.27		---	0.516
21	21/33	24.611	1.03	0.936		---	0.540
22		25.098	1.08	1.06		---	0.380
23		---	---	ND		---	0.00500
24		20.268	0.98	0.702		---	0.0200
25		23.605	0.94	0.396		---	0.100
26	26/29	23.303	1.03	0.740		---	0.0400
27		20.100	1.09	2.64		---	0.0200
28	20/28	24.343	1.04	(3.27)		---	0.516
29	26/29	23.303	1.03	(0.740)		---	0.0400
30	18/30	19.274	1.05	(2.11)		---	0.200
31		23.991	1.00	2.60		---	0.520
32		21.107	1.05	7.34		---	0.100
33	21/33	24.611	1.03	(0.936)		---	0.540
34		22.733	0.97	0.0322		---	0.00500
35		---	---	ND		---	0.0200
36		---	---	ND		---	0.0100
37		29.122	1.06	0.250		---	0.212
38		---	---	ND		---	0.0100
39		27.496	0.88	0.0681		---	0.0100
40	40/41/71	28.921	0.81	3.91		---	0.120
41	40/41/71	28.921	0.81	(3.91)		---	0.120
42		28.351	0.79	2.47		---	0.200
43	43/73	26.825	0.85	0.309		---	0.0200
44	44/47/65	27.714	0.79	7.16		---	0.600
45	45/51	24.410	0.78	5.20		---	0.0800
46		24.779	0.80	1.55		---	0.0100
47	44/47/65	27.714	0.79	(7.16)		---	0.600
48		27.479	0.79	1.78		---	0.200

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Basement AQ02479
Lab Sample ID 10220944002
Filename P130306A_04

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.144	0.79	6.80	---	0.400
50	50/53	23.605	0.78	4.58	---	0.0200
51	45/51	24.410	0.78	(5.20)	---	0.0800
52		26.573	0.83	10.0	---	0.492
53	50/53	23.605	0.78	(4.58)	---	0.0200
54		20.822	0.76	0.202	---	0.0100
55		---	---	ND	---	0.0100
56		33.231	0.78	0.552	---	0.200
57		30.984	0.80	0.0129	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.100	0.78	0.878	---	0.0300
60		33.466	0.76	0.327	---	0.200
61	61/70/74/76	32.124	0.76	2.52	---	0.800
62	59/62/75	28.100	0.78	(0.878)	---	0.0300
63		31.738	0.80	0.0555	---	0.0100
64		29.173	0.81	2.41	---	0.200
65	44/47/65	27.714	0.79	(7.16)	---	0.600
66		32.493	0.78	1.32	---	0.336
67		31.453	0.80	0.0419	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	27.144	0.79	(6.80)	---	0.400
70	61/70/74/76	32.124	0.76	(2.52)	---	0.800
71	40/41/71	28.921	0.81	(3.91)	---	0.120
72		30.196	0.65	0.0215	---	0.0100
73	43/73	26.825	0.85	(0.309)	---	0.0200
74	61/70/74/76	32.124	0.76	(2.52)	---	0.800
75	59/62/75	28.100	0.78	(0.878)	---	0.0300
76	61/70/74/76	32.124	0.76	(2.52)	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		35.763	0.57 I	---	0.0106	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		36.920	1.85 I	---	0.0407	0.0400
83		34.958	1.39	0.0202	---	0.0100
84		32.308	1.60	0.219	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	35.679	1.49	0.273	---	0.240
87	86/87/97/108/119/125	35.679	1.49	(0.273)	---	0.240
88	88/91	32.090	1.57	0.161	---	0.0200
89		32.862	1.85 I	---	0.0202	0.0100
90	90/101/113	34.472	1.54	0.333	---	0.120
91	88/91	32.090	1.57	(0.161)	---	0.0200
92		33.801	1.49	0.0644	---	0.0100
93	93/98/100/102	31.554	1.31 I	---	0.0909	0.0400
94		---	---	ND	---	0.0200
95		31.118	1.55	0.721	---	0.0760
96		28.066	1.50	0.0596	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Basement AQ02479
Lab Sample ID 10220944002
Filename P130306A_04

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.679	1.49	(0.273)	---	0.240
98	93/98/100/102	31.554	1.31 I	---	(0.0909)	0.0400
99		35.109	1.49	0.239	---	0.200
100	93/98/100/102	31.554	1.31 I	---	(0.0909)	0.0400
101	90/101/113	34.472	1.54	(0.333)	---	0.120
102	93/98/100/102	31.554	1.31 I	---	(0.0909)	0.0400
103		30.414	1.37	0.0129	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	35.679	1.49	(0.273)	---	0.240
109		39.435	1.67	0.0111	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.472	1.54	(0.333)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	35.679	1.49	(0.273)	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	35.679	1.49	(0.273)	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	43.259	1.07	0.0753	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		39.955	1.29	0.0300	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	37.691	1.30	0.0248	---	0.0200
136		34.941	1.43	0.0138	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	43.259	1.07	(0.0753)	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
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Filename P130306A_04

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		---	---	ND	---	0.0100
147	147/149	38.631	1.14	0.0690	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.631	1.14	(0.0690)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.691	1.30	(0.0248)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.934	1.21	0.0454	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.259	1.07	(0.0753)	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.934	1.21	(0.0454)	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		---	---	ND	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		---	---	ND	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Filename P130306A_04

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID	414 Basement AQ02479
Lab Sample ID	10220944002
Filename	P130306A_04

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.0420
Total Dichloro Biphenyls	4.47
Total Trichloro Biphenyls	40.6
Total Tetrachloro Biphenyls	52.1
Total Pentachloro Biphenyls	2.11
Total Hexachloro Biphenyls	0.258
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	99.6

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	414 Living Room AQ02480		
Lab Sample ID	10220944003		
Filename	P130306A_05		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 09:20
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 15:20

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.515	2.96	2.0	0.587	29
13C-4-MoCB	3	11.882	3.44	2.0	0.807	40
13C-2,2'-DiCB	4	12.229	1.62	2.0	0.773	39
13C-4,4'-DiCB	15	20.462	1.62	2.0	0.903	45
13C-2,2',6-TrCB	19	16.699	1.05	2.0	0.909	45
13C-3,4,4'-TrCB	37	29.090	1.11	2.0	1.13	56
13C-2,2',6,6'-TeCB	54	20.807	0.79	2.0	1.000	50
13C-3,4,4',5-TeCB	81	36.720	0.77	2.0	1.14	57
13C-3,3',4,4'-TeCB	77	37.340	0.77	2.0	1.25	63
13C-2,2',4,6,6'-PeCB	104	27.648	1.60	2.0	1.12	56
13C-2,3,3',4,4'-PeCB	105	41.130	1.53	2.0	1.28	64
13C-2,3,4,4',5-PeCB	114	40.442	1.59	2.0	1.30	65
13C-2,3',4,4',5-PeCB	118	39.889	1.60	2.0	1.26	63
13C-2,3',4,4',5'-PeCB	123	39.536	1.62	2.0	1.25	62
13C-3,3',4,4',5-PeCB	126	44.450	1.65	2.0	1.14	57
13C-2,2',4,4',6,6'-HxCB	155	34.188	1.28	2.0	1.45	72
13C-HxCB (156/157)	156/157	47.653	1.29	4.0	3.00	75
13C-2,3',4,4',5,5'-HxCB	167	46.445	1.26	2.0	1.52	76
13C-3,3',4,4',5,5'-HxCB	169	51.090	1.27	2.0	1.47	74
13C-2,2',3,4',5,6,6'-HpCB	188	40.442	1.06	2.0	1.34	67
13C-2,3,3',4,4',5,5'-HpCB	189	54.007	1.04	2.0	1.18	59
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.160	0.91	2.0	1.46	73
13C-2,3,3',4,4',5,5',6-OcCB	205	56.637	0.90	2.0	1.47	74
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.585	0.82	2.0	1.72	86
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.382	0.82	2.0	1.41	71
13C--DeCB	209	58.491	0.72	2.0	1.51	75
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.328	1.06	2.0	1.19	59
13C-2,3,3',5,5'-PeCB	111	37.424	1.56	2.0	1.35	68
13C-2,2',3,3',5,5',6-HpCB	178	43.712	1.07	2.0	1.66	83
Recovery Standards						
13C-2,5-DiCB	9	15.153	1.61	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.541	0.78	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.439	1.63	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.209	1.30	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.378	0.93	2.0	NA	NA

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Lab Sample ID 10220944003
Filename P130306A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		8.539	3.05	0.143		---	0.0200
2		11.655	3.33	0.0765	B	---	0.0200
3		11.906	3.27	0.196		---	0.0200
4		12.253	1.40	0.361		---	0.100
5		16.136	1.36	0.0241		---	0.0200
6		15.741	1.52	0.121		---	0.0200
7		15.405	1.34	0.0381		---	0.0200
8		16.340	1.56	0.499		---	0.250
9		15.177	1.51	0.0468		---	0.0200
10		12.517	1.55	0.944		---	0.0200
11		19.695	1.57	1.75	B	---	0.139
12	12/13	20.090	1.48	0.0760		---	0.0100
13	12/13	20.090	1.48	(0.0760)		---	0.0100
14		---	---	ND		---	0.0100
15		20.497	1.79	0.203		---	0.132
16		20.402	1.03	0.363		---	0.100
17		19.826	1.06	0.560		---	0.100
18	18/30	19.287	1.10	1.18		---	0.200
19		16.711	1.07	4.06		---	0.0264
20	20/28	24.344	1.04	1.27		---	0.516
21	21/33	24.630	1.05	0.553		---	0.540
22		---	---	ND		---	0.380
23		---	---	ND		---	0.00500
24		20.270	1.10	0.153		---	0.0200
25		23.590	0.93	0.108		---	0.100
26	26/29	23.305	1.09	0.231		---	0.0400
27		20.114	1.01	0.600		---	0.0200
28	20/28	24.344	1.04	(1.27)		---	0.516
29	26/29	23.305	1.09	(0.231)		---	0.0400
30	18/30	19.287	1.10	(1.18)		---	0.200
31		23.993	1.08	1.10		---	0.520
32		21.108	1.05	1.65		---	0.100
33	21/33	24.630	1.05	(0.553)		---	0.540
34		---	---	ND		---	0.00500
35		---	---	ND		---	0.0200
36		---	---	ND		---	0.0100
37		---	---	ND		---	0.212
38		---	---	ND		---	0.0100
39		27.464	0.83 I	---		0.0132	0.0100
40	40/41/71	28.923	0.78	0.639		---	0.120
41	40/41/71	28.923	0.78	(0.639)		---	0.120
42		28.336	0.81	0.405		---	0.200
43	43/73	26.843	0.72	0.0591		---	0.0200
44	44/47/65	27.715	0.79	1.49		---	0.600
45	45/51	24.395	0.75	0.984		---	0.0800
46		24.781	0.82	0.282		---	0.0100
47	44/47/65	27.715	0.79	(1.49)		---	0.600
48		27.480	0.80	0.360		---	0.200

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Living Room AQ02480
Lab Sample ID 10220944003
Filename P130306A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.145	0.79	1.22	---	0.400
50	50/53	23.607	0.79	0.872	---	0.0200
51	45/51	24.395	0.75	(0.984)	---	0.0800
52		26.575	0.81	2.10	---	0.492
53	50/53	23.607	0.79	(0.872)	---	0.0200
54		20.840	0.70	0.0418	---	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.101	0.80	0.147	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	32.125	0.76	1.09	---	0.800
62	59/62/75	28.101	0.80	(0.147)	---	0.0300
63		31.756	0.83	0.0207	---	0.0100
64		29.191	0.82	0.499	---	0.200
65	44/47/65	27.715	0.79	(1.49)	---	0.600
66		32.494	0.77	0.418	---	0.336
67		31.488	0.77	0.0129	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	27.145	0.79	(1.22)	---	0.400
70	61/70/74/76	32.125	0.76	(1.09)	---	0.800
71	40/41/71	28.923	0.78	(0.639)	---	0.120
72		---	---	ND	---	0.0100
73	43/73	26.843	0.72	(0.0591)	---	0.0200
74	61/70/74/76	32.125	0.76	(1.09)	---	0.800
75	59/62/75	28.101	0.80	(0.147)	---	0.0300
76	61/70/74/76	32.125	0.76	(1.09)	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		35.730	0.83	0.0263	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		36.938	1.57	0.0906	---	0.0400
83		34.942	1.58	0.0292	---	0.0100
84		32.326	1.50	0.244	---	0.0400
85	85/116/117	36.435	1.59	0.135	---	0.120
86	86/87/97/108/119/125	35.747	1.61	0.572	---	0.240
87	86/87/97/108/119/125	35.747	1.61	(0.572)	---	0.240
88	88/91	32.092	1.50	0.128	---	0.0200
89		32.846	1.61	0.0129	---	0.0100
90	90/101/113	34.473	1.59	0.788	---	0.120
91	88/91	32.092	1.50	(0.128)	---	0.0200
92		33.819	1.58	0.131	---	0.0100
93	93/98/100/102	31.538	1.40	0.0423	---	0.0400
94		---	---	ND	---	0.0200
95		31.119	1.65	0.617	---	0.0760
96		28.051	1.19 I	---	0.0115	0.0100

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Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Living Room AQ02480
Lab Sample ID 10220944003
Filename P130306A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.747	1.61	(0.572)		---	0.240
98	93/98/100/102	31.538	1.40	(0.0423)		---	0.0400
99		35.110	1.70	0.425		---	0.200
100	93/98/100/102	31.538	1.40	(0.0423)		---	0.0400
101	90/101/113	34.473	1.59	(0.788)		---	0.120
102	93/98/100/102	31.538	1.40	(0.0423)		---	0.0400
103		---	---	ND		---	0.0100
104		---	---	ND		---	0.0100
105		41.146	1.50	0.236		---	0.200
106		---	---	ND		---	0.0100
107	107/124	39.168	1.75	0.0239		---	0.0200
108	86/87/97/108/119/125	35.747	1.61	(0.572)		---	0.240
109		39.436	1.49	0.0352		---	0.0100
110	110/115	36.619	1.64	0.941		---	0.400
111		---	---	ND		---	0.0100
112		---	---	ND		---	0.0100
113	90/101/113	34.473	1.59	(0.788)		---	0.120
114		40.476	1.18 I	---		0.0137	0.0100
115	110/115	36.619	1.64	(0.941)		---	0.400
116	85/116/117	36.435	1.59	(0.135)		---	0.120
117	85/116/117	36.435	1.59	(0.135)		---	0.120
118		39.905	1.52	0.648		---	0.256
119	86/87/97/108/119/125	35.747	1.61	(0.572)		---	0.240
120		---	---	ND		---	0.0100
121		---	---	ND		---	0.0100
122		---	---	ND		---	0.0100
123		39.553	1.54	0.0129	J	---	0.0100
124	107/124	39.168	1.75	(0.0239)		---	0.0200
125	86/87/97/108/119/125	35.747	1.61	(0.572)		---	0.240
126		---	---	ND		---	0.0100
127		---	---	ND		---	0.0100
128	128/166	44.567	1.36	0.0575		---	0.0200
129	129/138/163	43.259	1.28	0.439		---	0.0600
130		42.555	1.16	0.0237		---	0.0100
131		---	---	ND		---	0.0100
132		39.972	1.27	0.172		---	0.0100
133		---	---	ND		---	0.0100
134	134/143	38.832	1.32	0.0223		---	0.0200
135	135/151	37.675	1.29	0.109		---	0.0200
136		34.925	1.32	0.0613		---	0.0100
137		42.790	1.19	0.0283		---	0.0100
138	129/138/163	43.259	1.28	(0.439)		---	0.0600
139	139/140	---	---	ND		---	0.0200
140	139/140	---	---	ND		---	0.0200
141		42.136	1.41	0.0622		---	0.0200
142		---	---	ND		---	0.0100
143	134/143	38.832	1.32	(0.0223)		---	0.0200
144		38.262	1.27	0.0182		---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Living Room AQ02480
Lab Sample ID 10220944003
Filename P130306A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.264	1.12	0.0509	---	0.0100
147	147/149	38.648	1.28	0.310	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.648	1.28	(0.310)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.675	1.29	(0.109)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.935	1.10	0.291	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	47.636	1.30	0.0402	---	0.0200
157	156/157	47.636	1.30	(0.0402)	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.259	1.28	(0.439)	---	0.0600
164		42.907	1.54 I	---	0.0175	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.567	1.36	(0.0575)	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.935	1.10	(0.291)	---	0.0400
169		---	---	ND	---	0.0120
170		50.453	1.09	0.0131	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		45.607	1.01	0.0220	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		46.026	1.10	0.0116	---	0.0100
178		---	---	ND	---	0.0100
179		40.778	1.04	0.0108	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		44.701	1.10	0.0235	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 414 Living Room AQ02480
Lab Sample ID 10220944003
Filename P130306A_05

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID	414 Living Room AQ02480
Lab Sample ID	10220944003
Filename	P130306A_05

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.415
Total Dichloro Biphenyls	4.07
Total Trichloro Biphenyls	11.8
Total Tetrachloro Biphenyls	10.7
Total Pentachloro Biphenyls	5.11
Total Hexachloro Biphenyls	1.69
Total Heptachloro Biphenyls	0.0809
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	33.9

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	418 Kitchen AQ02481		
Lab Sample ID	10220944004		
Filename	P130306A_06		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 10:28
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 16:22

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.635	3.18	2.0	0.186	9
13C-4-MoCB	3	12.265	2.96	2.0	0.503	25
13C-2,2'-DiCB	4	12.601	1.64	2.0	0.622	31
13C-4,4'-DiCB	15	20.569	1.60	2.0	0.968	48
13C-2,2',6-TrCB	19	16.854	1.07	2.0	0.835	42
13C-3,4,4'-TrCB	37	29.124	1.07	2.0	1.30	65
13C-2,2',6,6'-TeCB	54	20.924	0.81	2.0	0.992	50
13C-3,4,4',5-TeCB	81	36.755	0.80	2.0	1.40	70
13C-3,3',4,4'-TeCB	77	37.358	0.80	2.0	1.50	75
13C-2,2',4,6,6'-PeCB	104	27.682	1.62	2.0	1.20	60
13C-2,3,3',4,4'-PeCB	105	41.148	1.58	2.0	1.50	75
13C-2,3,4,4',5-PeCB	114	40.461	1.58	2.0	1.52	76
13C-2,3',4,4',5-PeCB	118	39.908	1.59	2.0	1.51	76
13C-2,3',4,4',5'-PeCB	123	39.555	1.59	2.0	1.50	75
13C-3,3',4,4',5-PeCB	126	44.469	1.59	2.0	1.40	70
13C-2,2',4,4',6,6'-HxCB	155	34.222	1.28	2.0	1.60	80
13C-HxCB (156/157)	156/157	47.672	1.28	4.0	3.56	89
13C-2,3',4,4',5,5'-HxCB	167	46.465	1.28	2.0	1.78	89
13C-3,3',4,4',5,5'-HxCB	169	51.093	1.29	2.0	1.79	89
13C-2,2',3,4',5,6,6'-HpCB	188	40.461	1.09	2.0	1.30	65
13C-2,3,3',4,4',5,5'-HpCB	189	54.011	1.06	2.0	1.37	68
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.197	0.90	2.0	1.41	70
13C-2,3,3',4,4',5,5',6-OcCB	205	56.662	0.91	2.0	1.66	83
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.589	0.78	2.0	1.90	95
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.386	0.81	2.0	1.38	69
13C--DeCB	209	58.494	0.71	2.0	1.65	83
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.378	1.07	2.0	1.29	65
13C-2,3,3',5,5'-PeCB	111	37.459	1.61	2.0	1.50	75
13C-2,2',3,3',5,5',6-HpCB	178	43.731	1.06	2.0	1.87	94
Recovery Standards						
13C-2,5-DiCB	9	15.381	1.58	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.592	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.473	1.61	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.245	1.29	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.382	0.92	2.0	NA	NA

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Kitchen AQ02481
Lab Sample ID 10220944004
Filename P130306A_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		8.767	3.84 I	---		0.0832	0.0200
2		12.097	3.23	0.0574	B	---	0.0200
3		12.277	3.28	0.170		---	0.0200
4		12.613	1.56	2.03		---	0.100
5		16.315	1.63	0.0981		---	0.0200
6		15.932	1.57	0.621		---	0.0200
7		15.608	1.58	0.149		---	0.0200
8		16.507	1.58	2.78		---	0.250
9		15.393	1.53	0.246		---	0.0200
10		12.852	1.60	0.641		---	0.0200
11		19.826	1.58	1.75	B	---	0.139
12	12/13	20.174	1.59	0.215		---	0.0100
13	12/13	20.174	1.59	(0.215)		---	0.0100
14		---	---	ND		---	0.0100
15		20.593	1.61	1.28		---	0.132
16		20.497	1.10	1.62		---	0.100
17		19.946	1.06	2.40		---	0.100
18	18/30	19.407	1.06	3.95		---	0.200
19		16.878	1.06	7.79		---	0.0264
20	20/28	24.412	1.05	6.47		---	0.516
21	21/33	24.680	1.06	2.31		---	0.540
22		25.150	1.03	1.97		---	0.380
23		23.020	0.90	0.00895		---	0.00500
24		20.378	0.97	0.421		---	0.0200
25		23.657	1.03	0.535		---	0.100
26	26/29	23.372	1.03	1.13		---	0.0400
27		20.222	1.06	1.80		---	0.0200
28	20/28	24.412	1.05	(6.47)		---	0.516
29	26/29	23.372	1.03	(1.13)		---	0.0400
30	18/30	19.407	1.06	(3.95)		---	0.200
31		24.043	1.07	4.83		---	0.520
32		21.209	1.05	5.86		---	0.100
33	21/33	24.680	1.06	(2.31)		---	0.540
34		22.819	1.05	0.0274		---	0.00500
35		28.688	1.09	0.0416		---	0.0200
36		---	---	ND		---	0.0100
37		29.141	1.05	0.478		---	0.212
38		28.168	1.16	0.0119		---	0.0100
39		27.531	1.11	0.0458		---	0.0100
40	40/41/71	28.956	0.81	2.64		---	0.120
41	40/41/71	28.956	0.81	(2.64)		---	0.120
42		28.386	0.80	1.74		---	0.200
43	43/73	26.894	0.85	0.237		---	0.0200
44	44/47/65	27.749	0.79	6.21		---	0.600
45	45/51	24.462	0.79	3.58		---	0.0800
46		24.848	0.80	1.09		---	0.0100
47	44/47/65	27.749	0.79	(6.21)		---	0.600
48		27.531	0.80	1.23		---	0.200

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Kitchen AQ02481
Lab Sample ID 10220944004
Filename P130306A_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.196	0.79	4.78	---	0.400
50	50/53	23.674	0.79	2.88	---	0.0200
51	45/51	24.462	0.79	(3.58)	---	0.0800
52		26.625	0.81	7.41	---	0.492
53	50/53	23.674	0.79	(2.88)	---	0.0200
54		20.957	0.81	0.141	---	0.0100
55		---	---	ND	---	0.0100
56		33.250	0.77	0.374	---	0.200
57		31.019	0.78	0.0106	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.152	0.80	0.691	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	32.159	0.78	2.69	---	0.800
62	59/62/75	28.152	0.80	(0.691)	---	0.0300
63		31.790	0.78	0.0552	---	0.0100
64		29.208	0.80	2.28	---	0.200
65	44/47/65	27.749	0.79	(6.21)	---	0.600
66		32.528	0.77	0.916	---	0.336
67		31.505	0.78	0.0545	---	0.0100
68		30.583	0.67	0.0108	---	0.0100
69	49/69	27.196	0.79	(4.78)	---	0.400
70	61/70/74/76	32.159	0.78	(2.69)	---	0.800
71	40/41/71	28.956	0.81	(2.64)	---	0.120
72		30.248	0.70	0.0153	---	0.0100
73	43/73	26.894	0.85	(0.237)	---	0.0200
74	61/70/74/76	32.159	0.78	(2.69)	---	0.800
75	59/62/75	28.152	0.80	(0.691)	---	0.0300
76	61/70/74/76	32.159	0.78	(2.69)	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		35.648	0.73	0.0150	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		36.972	1.65	0.186	---	0.0400
83		34.977	1.61	0.0826	---	0.0100
84		32.344	1.58	0.572	---	0.0400
85	85/116/117	36.452	1.57	0.309	---	0.120
86	86/87/97/108/119/125	35.765	1.53	1.30	---	0.240
87	86/87/97/108/119/125	35.765	1.53	(1.30)	---	0.240
88	88/91	32.126	1.66	0.280	---	0.0200
89		32.897	1.66	0.0236	---	0.0100
90	90/101/113	34.490	1.57	1.77	---	0.120
91	88/91	32.126	1.66	(0.280)	---	0.0200
92		33.836	1.60	0.278	---	0.0100
93	93/98/100/102	31.572	1.58	0.114	---	0.0400
94		---	---	ND	---	0.0200
95		31.153	1.57	1.44	---	0.0760
96		28.101	1.56	0.0524	---	0.0100

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Tel: 612-607-1700
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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Kitchen AQ02481
Lab Sample ID 10220944004
Filename P130306A_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.765	1.53	(1.30)		---	0.240
98	93/98/100/102	31.572	1.58	(0.114)		---	0.0400
99		35.145	1.59	0.838		---	0.200
100	93/98/100/102	31.572	1.58	(0.114)		---	0.0400
101	90/101/113	34.490	1.57	(1.77)		---	0.120
102	93/98/100/102	31.572	1.58	(0.114)		---	0.0400
103		30.432	1.65	0.0143		---	0.0100
104		---	---	ND		---	0.0100
105		41.182	1.56	0.290		---	0.200
106		---	---	ND		---	0.0100
107	107/124	39.186	1.60	0.0490		---	0.0200
108	86/87/97/108/119/125	35.765	1.53	(1.30)		---	0.240
109		39.454	1.54	0.0663		---	0.0100
110	110/115	36.654	1.61	2.10		---	0.400
111		---	---	ND		---	0.0100
112		---	---	ND		---	0.0100
113	90/101/113	34.490	1.57	(1.77)		---	0.120
114		40.478	1.57	0.0301		---	0.0100
115	110/115	36.654	1.61	(2.10)		---	0.400
116	85/116/117	36.452	1.57	(0.309)		---	0.120
117	85/116/117	36.452	1.57	(0.309)		---	0.120
118		39.941	1.55	1.12		---	0.256
119	86/87/97/108/119/125	35.765	1.53	(1.30)		---	0.240
120		---	---	ND		---	0.0100
121		---	---	ND		---	0.0100
122		---	---	ND		---	0.0100
123		39.572	1.58	0.0189	J	---	0.0100
124	107/124	39.186	1.60	(0.0490)		---	0.0200
125	86/87/97/108/119/125	35.765	1.53	(1.30)		---	0.240
126		---	---	ND		---	0.0100
127		---	---	ND		---	0.0100
128	128/166	44.586	1.28	0.0416		---	0.0200
129	129/138/163	43.278	1.24	0.484		---	0.0600
130		42.574	1.25	0.0312		---	0.0100
131		39.522	1.27	0.0246		---	0.0100
132		40.008	1.24	0.325		---	0.0100
133		---	---	ND		---	0.0100
134	134/143	38.868	1.35	0.0713		---	0.0200
135	135/151	37.677	1.25	0.296		---	0.0200
136		34.977	1.28	0.156		---	0.0100
137		42.826	1.14	0.0387		---	0.0100
138	129/138/163	43.278	1.24	(0.484)		---	0.0600
139	139/140	39.337	1.14	0.0265		---	0.0200
140	139/140	39.337	1.14	(0.0265)		---	0.0200
141		42.138	1.22	0.102		---	0.0200
142		---	---	ND		---	0.0100
143	134/143	38.868	1.35	(0.0713)		---	0.0200
144		38.298	1.33	0.0506		---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Kitchen AQ02481
Lab Sample ID 10220944004
Filename P130306A_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.299	1.22	0.0925	---	0.0100
147	147/149	38.683	1.25	0.800	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.683	1.25	(0.800)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.677	1.25	(0.296)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.970	1.25	0.467	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.278	1.24	(0.484)	---	0.0600
164		42.926	1.43	0.0272	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.586	1.28	(0.0416)	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.970	1.25	(0.467)	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		45.610	1.03	0.0296	---	0.0100
175		---	---	ND	---	0.0100
176		41.769	1.17	0.0119	---	0.0100
177		46.062	1.04	0.0136	---	0.0100
178		43.765	1.16	0.0106	---	0.0100
179		40.830	0.98	0.0392	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	45.391	1.07	0.0352	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	45.391	1.07	(0.0352)	---	0.0200
186		---	---	ND	---	0.0100
187		44.737	1.00	0.0672	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Kitchen AQ02481
Lab Sample ID 10220944004
Filename P130306A_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		46.213	0.95	0.0266	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	418 Kitchen AQ02481
Lab Sample ID	10220944004
Filename	P130306A_06

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.227
Total Dichloro Biphenyls	9.81
Total Trichloro Biphenyls	41.7
Total Tetrachloro Biphenyls	39.1
Total Pentachloro Biphenyls	10.9
Total Hexachloro Biphenyls	3.03
Total Heptachloro Biphenyls	0.208
Total Octachloro Biphenyls	0.0266
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	105

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	418 Outdoor AQ02482		
Lab Sample ID	10220944005		
Filename	P130306A_07		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 10:34
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 17:24

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.719	3.60	2.0	0.218	11
13C-4-MoCB	3	12.073	3.45	2.0	0.540	27
13C-2,2'-DiCB	4	12.421	1.56	2.0	0.623	31
13C-4,4'-DiCB	15	20.497	1.56	2.0	0.723	36
13C-2,2',6-TrCB	19	16.770	1.04	2.0	0.701	35
13C-3,4,4'-TrCB	37	29.090	1.05	2.0	0.912	46
13C-2,2',6,6'-TeCB	54	20.839	0.80	2.0	0.802	40
13C-3,4,4',5-TeCB	81	36.737	0.78	2.0	1.06	53
13C-3,3',4,4'-TeCB	77	37.341	0.78	2.0	1.16	58
13C-2,2',4,6,6'-PeCB	104	27.648	1.60	2.0	0.860	43
13C-2,3,3',4,4'-PeCB	105	41.131	1.61	2.0	1.23	61
13C-2,3,4,4',5-PeCB	114	40.444	1.61	2.0	1.23	61
13C-2,3',4,4',5-PeCB	118	39.890	1.62	2.0	1.21	61
13C-2,3',4,4',5'-PeCB	123	39.538	1.59	2.0	1.17	59
13C-3,3',4,4',5-PeCB	126	44.452	1.61	2.0	1.09	55
13C-2,2',4,4',6,6'-HxCB	155	34.205	1.26	2.0	1.17	58
13C-HxCB (156/157)	156/157	47.655	1.29	4.0	2.91	73
13C-2,3',4,4',5,5'-HxCB	167	46.447	1.30	2.0	1.43	72
13C-3,3',4,4',5,5'-HxCB	169	51.093	1.26	2.0	1.48	74
13C-2,2',3,4',5,6,6'-HpCB	188	40.444	1.05	2.0	1.00	50
13C-2,3,3',4,4',5,5'-HpCB	189	53.989	1.06	2.0	1.09	54
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.179	0.91	2.0	1.10	55
13C-2,3,3',4,4',5,5',6-OcCB	205	56.640	0.90	2.0	1.38	69
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.589	0.78	2.0	1.56	78
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.385	0.81	2.0	1.13	56
13C--DeCB	209	58.472	0.72	2.0	1.33	67
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.327	1.05	2.0	0.933	47
13C-2,3,3',5,5'-PeCB	111	37.425	1.62	2.0	1.17	58
13C-2,2',3,3',5,5',6-HpCB	178	43.714	1.06	2.0	1.43	71
Recovery Standards						
13C-2,5-DiCB	9	15.260	1.61	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.558	0.80	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.440	1.62	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.228	1.29	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.381	0.92	2.0	NA	NA

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Outdoor AQ02482
Lab Sample ID 10220944005
Filename P130306A_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		---	---	ND	---	0.0200
2		11.882	3.45	0.0211 B	---	0.0200
3		---	---	ND	---	0.0200
4		---	---	ND	---	0.100
5		---	---	ND	---	0.0200
6		---	---	ND	---	0.0200
7		15.512	1.42	0.0441	---	0.0200
8		---	---	ND	---	0.250
9		---	---	ND	---	0.0200
10		12.684	1.50	0.155	---	0.0200
11		---	---	ND	---	0.139
12	12/13	20.113	1.36	0.0144	---	0.0100
13	12/13	20.113	1.36	(0.0144)	---	0.0100
14		---	---	ND	---	0.0100
15		---	---	ND	---	0.132
16		---	---	ND	---	0.100
17		---	---	ND	---	0.100
18	18/30	---	---	ND	---	0.200
19		16.794	1.07	0.554	---	0.0264
20	20/28	---	---	ND	---	0.516
21	21/33	---	---	ND	---	0.540
22		---	---	ND	---	0.380
23		---	---	ND	---	0.00500
24		20.305	1.16	0.0273	---	0.0200
25		---	---	ND	---	0.100
26	26/29	---	---	ND	---	0.0400
27		20.149	1.05	0.0959	---	0.0200
28	20/28	---	---	ND	---	0.516
29	26/29	---	---	ND	---	0.0400
30	18/30	---	---	ND	---	0.200
31		---	---	ND	---	0.520
32		21.124	1.04	0.306	---	0.100
33	21/33	---	---	ND	---	0.540
34		---	---	ND	---	0.00500
35		---	---	ND	---	0.0200
36		---	---	ND	---	0.0100
37		---	---	ND	---	0.212
38		---	---	ND	---	0.0100
39		---	---	ND	---	0.0100
40	40/41/71	---	---	ND	---	0.120
41	40/41/71	---	---	ND	---	0.120
42		---	---	ND	---	0.200
43	43/73	---	---	ND	---	0.0200
44	44/47/65	---	---	ND	---	0.600
45	45/51	24.428	0.76	0.104	---	0.0800
46		24.814	0.86	0.0290	---	0.0100
47	44/47/65	---	---	ND	---	0.600
48		---	---	ND	---	0.200

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Outdoor AQ02482
Lab Sample ID 10220944005
Filename P130306A_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	---	---	ND	---	0.400
50	50/53	23.623	0.76	0.0803	---	0.0200
51	45/51	24.428	0.76	(0.104)	---	0.0800
52		---	---	ND	---	0.492
53	50/53	23.623	0.76	(0.0803)	---	0.0200
54		---	---	ND	---	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	---	---	ND	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	---	---	ND	---	0.0300
63		---	---	ND	---	0.0100
64		---	---	ND	---	0.200
65	44/47/65	---	---	ND	---	0.600
66		---	---	ND	---	0.336
67		---	---	ND	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	---	---	ND	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	---	---	ND	---	0.120
72		---	---	ND	---	0.0100
73	43/73	---	---	ND	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	---	---	ND	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		---	---	ND	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	---	---	ND	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	---	---	ND	---	0.120
91	88/91	---	---	ND	---	0.0200
92		---	---	ND	---	0.0100
93	93/98/100/102	---	---	ND	---	0.0400
94		---	---	ND	---	0.0200
95		---	---	ND	---	0.0760
96		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Outdoor AQ02482
Lab Sample ID 10220944005
Filename P130306A_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	---	---	ND	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	---	---	ND	---	0.0400
101	90/101/113	---	---	ND	---	0.120
102	93/98/100/102	---	---	ND	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	---	---	ND	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	---	---	ND	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		---	---	ND	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	---	---	ND	---	0.0200
136		---	---	ND	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	---	---	ND	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Outdoor AQ02482
Lab Sample ID 10220944005
Filename P130306A_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		---	---	ND	---	0.0100
147	147/149	---	---	ND	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	---	---	ND	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	---	---	ND	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	---	---	ND	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	---	---	ND	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	---	---	ND	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		---	---	ND	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		---	---	ND	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Outdoor AQ02482
Lab Sample ID 10220944005
Filename P130306A_07

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID	418 Outdoor AQ02482
Lab Sample ID	10220944005
Filename	P130306A_07

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.0211
Total Dichloro Biphenyls	0.213
Total Trichloro Biphenyls	0.983
Total Tetrachloro Biphenyls	0.213
Total Pentachloro Biphenyls	ND
Total Hexachloro Biphenyls	ND
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	1.43

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	418 Basement AQ02483		
Lab Sample ID	10220944006		
Filename	P130306A_08		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 10:42
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 18:27

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery	
Labeled Analytes							
13C-2-MoCB	1	8.791	4.93	2.0	0.158	11	I
13C-4-MoCB	3	12.145	3.44	2.0	0.593	30	
13C-2,2'-DiCB	4	12.493	1.61	2.0	0.692	35	
13C-4,4'-DiCB	15	20.519	1.63	2.0	0.820	41	
13C-2,2',6-TrCB	19	16.793	1.05	2.0	0.770	39	
13C-3,4,4'-TrCB	37	29.104	1.08	2.0	1.02	51	
13C-2,2',6,6'-TeCB	54	20.854	0.81	2.0	0.872	44	
13C-3,4,4',5-TeCB	81	36.733	0.79	2.0	1.14	57	
13C-3,3',4,4'-TeCB	77	37.337	0.79	2.0	1.27	63	
13C-2,2',4,6,6'-PeCB	104	27.662	1.60	2.0	0.934	47	
13C-2,3,3',4,4'-PeCB	105	41.126	1.61	2.0	1.32	66	
13C-2,3,4,4',5-PeCB	114	40.456	1.62	2.0	1.29	64	
13C-2,3',4,4',5-PeCB	118	39.903	1.59	2.0	1.27	64	
13C-2,3',4,4',5'-PeCB	123	39.534	1.57	2.0	1.25	63	
13C-3,3',4,4',5-PeCB	126	44.463	1.60	2.0	1.22	61	
13C-2,2',4,4',6,6'-HxCB	155	34.201	1.27	2.0	1.21	60	
13C-HxCB (156/157)	156/157	47.666	1.26	4.0	3.07	77	
13C-2,3',4,4',5,5'-HxCB	167	46.458	1.28	2.0	1.53	77	
13C-3,3',4,4',5,5'-HxCB	169	51.086	1.26	2.0	1.58	79	
13C-2,2',3,4',5,6,6'-HpCB	188	40.456	1.05	2.0	0.979	49	
13C-2,3,3',4,4',5,5'-HpCB	189	53.999	1.06	2.0	1.17	59	
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.190	0.90	2.0	1.15	58	
13C-2,3,3',4,4',5,5',6-OcCB	205	56.650	0.91	2.0	1.44	72	
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.598	0.80	2.0	1.62	81	
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.396	0.80	2.0	1.20	60	
13C--DeCB	209	58.482	0.72	2.0	1.46	73	
Cleanup Standards							
13C-2,4,4'-TrCB	28	24.342	1.07	2.0	1.06	53	
13C-2,3,3',5,5'-PeCB	111	37.438	1.61	2.0	1.23	62	
13C-2,2',3,3',5,5',6-HpCB	178	43.725	1.05	2.0	1.53	76	
Recovery Standards							
13C-2,5-DiCB	9	15.284	1.60	2.0	NA	NA	
13C-2,2',5,5'-TeCB	52	26.572	0.79	2.0	NA	NA	
13C-2,2',4,5,5'-PeCB	101	34.453	1.58	2.0	NA	NA	
13C-2,2',3,4,4',5'-HxCB	138	43.222	1.28	2.0	NA	NA	
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.391	0.92	2.0	NA	NA	

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Basement AQ02483
Lab Sample ID 10220944006
Filename P130306A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		---	---	ND		---	0.0200
2		11.965	3.11	0.0281	B	---	0.0200
3		---	---	ND		---	0.0200
4		12.505	1.52	0.304		---	0.100
5		---	---	ND		---	0.0200
6		15.847	1.46	0.0428		---	0.0200
7		---	---	ND		---	0.0200
8		---	---	ND		---	0.250
9		---	---	ND		---	0.0200
10		12.744	1.59	0.817		---	0.0200
11		19.752	1.54	0.160	B	---	0.139
12	12/13	20.160	1.55	0.0633		---	0.0100
13	12/13	20.160	1.55	(0.0633)		---	0.0100
14		---	---	ND		---	0.0100
15		20.531	1.58	0.366		---	0.132
16		20.447	1.05	0.247		---	0.100
17		19.884	1.09	0.812		---	0.100
18	18/30	19.345	1.05	0.799		---	0.200
19		16.817	1.07	8.14		---	0.0264
20	20/28	24.376	1.06	2.80		---	0.516
21	21/33	---	---	ND		---	0.540
22		25.114	1.03	0.783		---	0.380
23		---	---	ND		---	0.00500
24		20.327	1.02	0.463		---	0.0200
25		23.621	1.07	0.314		---	0.100
26	26/29	23.336	1.06	0.366		---	0.0400
27		20.160	1.07	2.01		---	0.0200
28	20/28	24.376	1.06	(2.80)		---	0.516
29	26/29	23.336	1.06	(0.366)		---	0.0400
30	18/30	19.345	1.05	(0.799)		---	0.200
31		24.007	1.05	1.14		---	0.520
32		21.140	1.03	6.20		---	0.100
33	21/33	---	---	ND		---	0.540
34		22.766	0.91	0.0159		---	0.00500
35		---	---	ND		---	0.0200
36		---	---	ND		---	0.0100
37		---	---	ND		---	0.212
38		28.132	1.11	0.0195		---	0.0100
39		27.511	0.96	0.0417		---	0.0100
40	40/41/71	28.937	0.79	3.60		---	0.120
41	40/41/71	28.937	0.79	(3.60)		---	0.120
42		28.366	0.78	2.45		---	0.200
43	43/73	26.857	0.83	0.268		---	0.0200
44	44/47/65	27.729	0.80	7.82		---	0.600
45	45/51	24.426	0.81	4.57		---	0.0800
46		24.812	0.80	1.42		---	0.0100
47	44/47/65	27.729	0.80	(7.82)		---	0.600
48		27.494	0.79	1.04		---	0.200

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Basement AQ02483
Lab Sample ID 10220944006
Filename P130306A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.176	0.79	6.35	---	0.400
50	50/53	23.638	0.79	3.72	---	0.0200
51	45/51	24.426	0.81	(4.57)	---	0.0800
52		26.589	0.80	8.51	---	0.492
53	50/53	23.638	0.79	(3.72)	---	0.0200
54		20.871	0.80	0.167	---	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		31.015	0.85	0.0119	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.115	0.80	0.920	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	28.115	0.80	(0.920)	---	0.0300
63		31.770	0.79	0.0451	---	0.0100
64		29.188	0.79	2.77	---	0.200
65	44/47/65	27.729	0.80	(7.82)	---	0.600
66		32.508	0.78	0.524	---	0.336
67		31.468	0.73	0.0444	---	0.0100
68		30.546	0.68	0.0108	---	0.0100
69	49/69	27.176	0.79	(6.35)	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	28.937	0.79	(3.60)	---	0.120
72		30.211	0.69	0.0214	---	0.0100
73	43/73	26.857	0.83	(0.268)	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	28.115	0.80	(0.920)	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		32.340	1.64	0.153	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	32.105	1.60	0.158	---	0.0200
89		32.877	1.49	0.0144	---	0.0100
90	90/101/113	34.470	1.56	0.152	---	0.120
91	88/91	32.105	1.60	(0.158)	---	0.0200
92		33.816	1.55	0.0352	---	0.0100
93	93/98/100/102	31.552	1.56	0.126	---	0.0400
94		30.630	1.56	0.0221	---	0.0200
95		31.133	1.59	0.688	---	0.0760
96		28.081	1.71	0.0707	---	0.0100

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Basement AQ02483
Lab Sample ID 10220944006
Filename P130306A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	31.552	1.56	(0.126)	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	31.552	1.56	(0.126)	---	0.0400
101	90/101/113	34.470	1.56	(0.152)	---	0.120
102	93/98/100/102	31.552	1.56	(0.126)	---	0.0400
103		30.395	1.66	0.0172	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.470	1.56	(0.152)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	---	---	ND	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		39.986	1.12	0.0141	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	37.639	1.27	0.0201	---	0.0200
136		---	---	ND	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	---	---	ND	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Basement AQ02483
Lab Sample ID 10220944006
Filename P130306A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		---	---	ND	---	0.0100
147	147/149	38.662	1.22	0.0424	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.662	1.22	(0.0424)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.639	1.27	(0.0201)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	---	---	ND	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	---	---	ND	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	---	---	ND	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		40.808	1.00	0.0107	---	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		44.731	1.03	0.0605	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 418 Basement AQ02483
Lab Sample ID 10220944006
Filename P130306A_08

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	51.237	0.84	0.0509	---	0.0300
199	198/199	51.237	0.84	(0.0509)	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		46.207	0.89	0.0675	---	0.0150
203		52.159	0.86	0.0361	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		53.438	0.77	0.0234	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	418 Basement AQ02483
Lab Sample ID	10220944006
Filename	P130306A_08

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.0281
Total Dichloro Biphenyls	1.75
Total Trichloro Biphenyls	24.1
Total Tetrachloro Biphenyls	44.3
Total Pentachloro Biphenyls	1.44
Total Hexachloro Biphenyls	0.0766
Total Heptachloro Biphenyls	0.0713
Total Octachloro Biphenyls	0.155
Total Nonachloro Biphenyls	0.0234
Decachloro Biphenyls	ND
Total PCBs	72.0

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	403 Living Room AQ02484		
Lab Sample ID	10220944007		
Filename	P130306A_09		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 10:42
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 19:29

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery	
Labeled Analytes							
13C-2-MoCB	1	8.743	1.50	2.0	0.508	32	I
13C-4-MoCB	3	12.074	2.28	2.0	0.752	41	I
13C-2,2'-DiCB	4	12.421	1.63	2.0	0.980	49	
13C-4,4'-DiCB	15	20.521	1.50	2.0	0.781	39	
13C-2,2',6-TrCB	19	16.771	1.03	2.0	1.10	55	
13C-3,4,4'-TrCB	37	29.105	1.00	2.0	0.823	41	
13C-2,2',6,6'-TeCB	54	20.856	0.86	2.0	0.895	45	
13C-3,4,4',5-TeCB	81	36.750	0.81	2.0	1.02	51	
13C-3,3',4,4'-TeCB	77	37.354	0.74	2.0	1.13	56	
13C-2,2',4,6,6'-PeCB	104	27.663	1.60	2.0	1.34	67	
13C-2,3,3',4,4'-PeCB	105	41.143	1.75	2.0	0.970	48	
13C-2,3,4,4',5-PeCB	114	40.472	1.62	2.0	0.962	48	
13C-2,3',4,4',5-PeCB	118	39.903	1.51	2.0	1.00	50	
13C-2,3',4,4',5'-PeCB	123	39.550	1.50	2.0	1.03	51	
13C-3,3',4,4',5-PeCB	126	44.463	1.59	2.0	0.692	35	
13C-2,2',4,4',6,6'-HxCB	155	34.218	1.21	2.0	2.46	123	
13C-HxCB (156/157)	156/157	47.648	1.31	4.0	2.14	54	
13C-2,3',4,4',5,5'-HxCB	167	46.475	1.24	2.0	1.16	58	
13C-3,3',4,4',5,5'-HxCB	169	51.102	1.21	2.0	0.952	48	
13C-2,2',3,4',5,6,6'-HpCB	188	40.456	1.05	2.0	2.05	102	
13C-2,3,3',4,4',5,5'-HpCB	189	54.019	1.06	2.0	0.853	43	
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.173	0.90	2.0	1.83	91	
13C-2,3,3',4,4',5,5',6-OcCB	205	56.649	0.91	2.0	1.46	73	
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.575	0.75	2.0	2.19	110	
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.394	0.74	2.0	1.37	69	
13C--DeCB	209	58.480	0.67	2.0	2.28	114	
Cleanup Standards							
13C-2,4,4'-TrCB	28	24.360	1.09	2.0	0.899	45	
13C-2,3,3',5,5'-PeCB	111	37.454	1.51	2.0	1.41	71	
13C-2,2',3,3',5,5',6-HpCB	178	43.742	1.05	2.0	2.32	116	
Recovery Standards							
13C-2,5-DiCB	9	15.261	1.54	2.0	NA	NA	
13C-2,2',5,5'-TeCB	52	26.573	0.81	2.0	NA	NA	
13C-2,2',4,5,5'-PeCB	101	34.470	1.59	2.0	NA	NA	
13C-2,2',3,4,4',5'-HxCB	138	43.239	1.25	2.0	NA	NA	
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.390	0.87	2.0	NA	NA	

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 403 Living Room AQ02484
Lab Sample ID 10220944007
Filename P130306A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		8.803	3.15	0.170	---	0.0200
2		11.858	2.29 I	---	0.0744	0.0200
3		12.110	2.73	0.183	---	0.0200
4		12.433	1.34	0.909	---	0.100
5		16.423	1.59	0.958	---	0.0200
6		---	---	ND	---	0.0200
7		15.824	1.58	0.264	---	0.0200
8		16.819	1.72	0.668	---	0.250
9		15.500	1.29 I	---	0.0674	0.0200
10		12.685	1.54	17.1	---	0.0200
11		19.742	1.57	2.55	---	0.139
12	12/13	---	---	ND	---	0.0100
13	12/13	---	---	ND	---	0.0100
14		---	---	ND	---	0.0100
15		20.533	1.70	0.519	---	0.132
16		20.473	0.92	0.660	---	0.100
17		19.886	1.03	2.48	---	0.100
18	18/30	19.347	1.10	1.97	---	0.200
19		16.795	1.06	35.8	---	0.0264
20	20/28	24.394	1.08	2.80	---	0.516
21	21/33	24.662	1.09	0.545	---	0.540
22		25.098	1.06	0.677	---	0.380
23		---	---	ND	---	0.00500
24		20.317	0.92	1.34	---	0.0200
25		23.622	1.04	0.248	---	0.100
26	26/29	23.354	1.04	0.808	---	0.0400
27		20.161	1.05	5.16	---	0.0200
28	20/28	24.394	1.08	(2.80)	---	0.516
29	26/29	23.354	1.04	(0.808)	---	0.0400
30	18/30	19.347	1.10	(1.97)	---	0.200
31		24.025	1.08	2.17	---	0.520
32		21.158	1.05	13.2	---	0.100
33	21/33	24.662	1.09	(0.545)	---	0.540
34		---	---	ND	---	0.00500
35		28.686	1.38 I	---	0.0492	0.0200
36		---	---	ND	---	0.0100
37		29.155	0.89	0.287	---	0.212
38		---	---	ND	---	0.0100
39		---	---	ND	---	0.0100
40	40/41/71	28.954	0.72	2.99	---	0.120
41	40/41/71	28.954	0.72	(2.99)	---	0.120
42		28.367	0.85	2.03	---	0.200
43	43/73	---	---	ND	---	0.0200
44	44/47/65	27.747	0.77	7.26	---	0.600
45	45/51	24.444	0.81	4.75	---	0.0800
46		24.813	0.81	1.15	---	0.0100
47	44/47/65	27.747	0.77	(7.26)	---	0.600
48		27.495	0.84	1.23	---	0.200

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IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.177	0.78	5.86	---	0.400
50	50/53	23.639	0.77	3.92	---	0.0200
51	45/51	24.444	0.81	(4.75)	---	0.0800
52		26.607	0.77	10.4	---	0.492
53	50/53	23.639	0.77	(3.92)	---	0.0200
54		20.873	0.77	0.248	---	0.0100
55		---	---	ND	---	0.0100
56		33.263	0.83	0.435	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.132	0.71	0.713	---	0.0300
60		33.498	0.75	0.200	---	0.200
61	61/70/74/76	32.156	0.77	3.69	---	0.800
62	59/62/75	28.132	0.71	(0.713)	---	0.0300
63		---	---	ND	---	0.0100
64		29.222	0.80	2.88	---	0.200
65	44/47/65	27.747	0.77	(7.26)	---	0.600
66		32.508	0.81	1.07	---	0.336
67		---	---	ND	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	27.177	0.78	(5.86)	---	0.400
70	61/70/74/76	32.156	0.77	(3.69)	---	0.800
71	40/41/71	28.954	0.72	(2.99)	---	0.120
72		---	---	ND	---	0.0100
73	43/73	---	---	ND	---	0.0200
74	61/70/74/76	32.156	0.77	(3.69)	---	0.800
75	59/62/75	28.132	0.71	(0.713)	---	0.0300
76	61/70/74/76	32.156	0.77	(3.69)	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		35.677	1.00 I	---	0.0546	0.0100
80		---	---	ND	---	0.0100
81		36.750	1.52 I	---	0.0219	0.0120
82		36.968	1.47	0.611	---	0.0400
83		34.990	1.52	0.304	---	0.0100
84		32.357	1.52	2.17	---	0.0400
85	85/116/117	36.465	1.59	0.998	---	0.120
86	86/87/97/108/119/125	35.761	1.53	4.18	---	0.240
87	86/87/97/108/119/125	35.761	1.53	(4.18)	---	0.240
88	88/91	32.123	1.55	1.06	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	34.504	1.66	5.98	---	0.120
91	88/91	32.123	1.55	(1.06)	---	0.0200
92		33.833	1.59	1.05	---	0.0100
93	93/98/100/102	31.569	1.65	0.337	---	0.0400
94		---	---	ND	---	0.0200
95		31.150	1.55	5.43	---	0.0760
96		28.082	1.25 I	---	0.116	0.0100

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 403 Living Room AQ02484
Lab Sample ID 10220944007
Filename P130306A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.761	1.53	(4.18)	---	0.240
98	93/98/100/102	31.569	1.65	(0.337)	---	0.0400
99		35.124	1.51	3.04	---	0.200
100	93/98/100/102	31.569	1.65	(0.337)	---	0.0400
101	90/101/113	34.504	1.66	(5.98)	---	0.120
102	93/98/100/102	31.569	1.65	(0.337)	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		41.160	1.56	1.12	---	0.200
106		---	---	ND	---	0.0100
107	107/124	39.198	1.78	0.145	---	0.0200
108	86/87/97/108/119/125	35.761	1.53	(4.18)	---	0.240
109		39.466	1.66	0.182	---	0.0100
110	110/115	36.633	1.56	7.27	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.504	1.66	(5.98)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	36.633	1.56	(7.27)	---	0.400
116	85/116/117	36.465	1.59	(0.998)	---	0.120
117	85/116/117	36.465	1.59	(0.998)	---	0.120
118		39.936	1.60	3.23	---	0.256
119	86/87/97/108/119/125	35.761	1.53	(4.18)	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		39.567	2.30 I	---	0.0632	0.0100
124	107/124	39.198	1.78	(0.145)	---	0.0200
125	86/87/97/108/119/125	35.761	1.53	(4.18)	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	44.580	1.22	0.395	---	0.0200
129	129/138/163	43.272	1.26	3.02	---	0.0600
130		42.585	1.18	0.163	---	0.0100
131		39.517	1.30	0.106	---	0.0100
132		40.003	1.21	1.47	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	38.880	1.12	0.286	---	0.0200
135	135/151	37.673	1.23	1.46	---	0.0200
136		34.973	1.20	0.843	---	0.0100
137		42.803	1.04 I	---	0.166	0.0100
138	129/138/163	43.272	1.26	(3.02)	---	0.0600
139	139/140	39.316	1.28	0.100	---	0.0200
140	139/140	39.316	1.28	(0.100)	---	0.0200
141		42.132	1.16	0.497	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	38.880	1.12	(0.286)	---	0.0200
144		38.259	1.27	0.203	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 403 Living Room AQ02484
Lab Sample ID 10220944007
Filename P130306A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.294	1.38	0.386	---	0.0100
147	147/149	38.679	1.25	3.00	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.679	1.25	(3.00)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.673	1.23	(1.46)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.948	1.27	2.16	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	47.665	1.23	0.212	---	0.0200
157	156/157	47.665	1.23	(0.212)	---	0.0200
158		43.675	1.45 I	---	0.259	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.272	1.26	(3.02)	---	0.0600
164		42.937	1.20	0.176	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.580	1.22	(0.395)	---	0.0200
167		46.508	1.11	0.0823	---	0.0200
168	153/168	41.948	1.27	(2.16)	---	0.0400
169		---	---	ND	---	0.0120
170		50.449	1.22 I	---	0.0715	0.0100
171	171/173	46.727	0.98	0.0530	---	0.0200
172		48.504	1.06	0.0288	---	0.0100
173	171/173	46.727	0.98	(0.0530)	---	0.0200
174		45.586	0.88	0.129	---	0.0100
175		---	---	ND	---	0.0100
176		41.780	0.86 I	---	0.0326	0.0100
177		46.056	1.00	0.0724	---	0.0100
178		43.759	0.86 I	---	0.0409	0.0100
179		40.825	1.15	0.150	---	0.0100
180	180/193	49.141	1.11	0.188	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	45.368	0.91	0.0934	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	45.368	0.91	(0.0934)	---	0.0200
186		---	---	ND	---	0.0100
187		44.714	1.05	0.249	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		51.002	1.47 I	---	0.0193	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 403 Living Room AQ02484
Lab Sample ID 10220944007
Filename P130306A_09

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	49.141	1.11	(0.188)	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	403 Living Room AQ02484
Lab Sample ID	10220944007
Filename	P130306A_09

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.353
Total Dichloro Biphenyls	22.9
Total Trichloro Biphenyls	68.1
Total Tetrachloro Biphenyls	48.8
Total Pentachloro Biphenyls	37.1
Total Hexachloro Biphenyls	14.6
Total Heptachloro Biphenyls	0.964
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	193

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	406 Basement AQ02485		
Lab Sample ID	10220944008		
Filename	P130306A_10		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 12:44
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 20:31

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery	
Labeled Analytes							
13C-2-MoCB	1	8.755	2.36	2.0	0.794	43	I
13C-4-MoCB	3	12.074	2.88	2.0	0.961	48	
13C-2,2'-DiCB	4	12.422	1.60	2.0	1.27	63	
13C-4,4'-DiCB	15	20.521	1.50	2.0	0.906	45	
13C-2,2',6-TrCB	19	16.807	1.11	2.0	1.26	63	
13C-3,4,4'-TrCB	37	29.105	0.95	2.0	0.838	42	
13C-2,2',6,6'-TeCB	54	20.874	0.83	2.0	1.11	56	
13C-3,4,4',5-TeCB	81	36.717	0.76	2.0	0.880	44	
13C-3,3',4,4'-TeCB	77	37.354	0.81	2.0	0.940	47	
13C-2,2',4,6,6'-PeCB	104	27.681	1.50	2.0	1.68	84	
13C-2,3,3',4,4'-PeCB	105	41.144	1.46	2.0	0.952	48	
13C-2,3,4,4',5-PeCB	114	40.439	1.55	2.0	0.952	48	
13C-2,3',4,4',5-PeCB	118	39.886	1.53	2.0	0.900	45	
13C-2,3',4,4',5'-PeCB	123	39.534	1.48	2.0	1.02	51	
13C-3,3',4,4',5-PeCB	126	44.447	1.50	2.0	0.844	42	
13C-2,2',4,4',6,6'-HxCB	155	34.202	1.23	2.0	2.24	112	
13C-HxCB (156/157)	156/157	47.666	1.27	4.0	2.28	57	
13C-2,3',4,4',5,5'-HxCB	167	46.459	1.25	2.0	1.16	58	
13C-3,3',4,4',5,5'-HxCB	169	51.103	1.27	2.0	1.09	54	
13C-2,2',3,4',5,6,6'-HpCB	188	40.456	0.97	2.0	1.74	87	
13C-2,3,3',4,4',5,5'-HpCB	189	54.020	1.11	2.0	0.861	43	
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.174	0.89	2.0	1.82	91	
13C-2,3,3',4,4',5,5',6-OcCB	205	56.649	0.93	2.0	1.57	78	
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.576	0.82	2.0	2.42	121	
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.395	0.77	2.0	1.48	74	
13C--DeCB	209	58.481	0.70	2.0	2.34	117	
Cleanup Standards							
13C-2,4,4'-TrCB	28	24.361	1.05	2.0	1.02	51	
13C-2,3,3',5,5'-PeCB	111	37.438	1.63	2.0	1.46	73	
13C-2,2',3,3',5,5',6-HpCB	178	43.726	1.01	2.0	2.17	108	
Recovery Standards							
13C-2,5-DiCB	9	15.333	1.60	2.0	NA	NA	
13C-2,2',5,5'-TeCB	52	26.557	0.82	2.0	NA	NA	
13C-2,2',4,5,5'-PeCB	101	34.437	1.65	2.0	NA	NA	
13C-2,2',3,4,4',5'-HxCB	138	43.239	1.26	2.0	NA	NA	
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.391	0.92	2.0	NA	NA	

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Basement AQ02485
Lab Sample ID 10220944008
Filename P130306A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		8.743	3.38	0.437		---	0.0200
2		11.858	3.50	0.0665	B	---	0.0200
3		12.086	3.53	0.352		---	0.0200
4		12.434	1.46	3.17		---	0.100
5		16.268	1.45	0.179		---	0.0200
6		15.873	1.54	1.32		---	0.0200
7		15.573	1.35	0.296		---	0.0200
8		16.460	1.52	5.96		---	0.250
9		15.357	1.47	0.516		---	0.0200
10		12.697	1.33	0.679		---	0.0200
11		19.767	1.65	0.321	B	---	0.139
12	12/13	20.138	1.40	0.412		---	0.0100
13	12/13	20.138	1.40	(0.412)		---	0.0100
14		---	---	ND		---	0.0100
15		20.557	1.61	4.35		---	0.132
16		20.461	1.05	6.72		---	0.100
17		19.898	1.08	7.26		---	0.100
18	18/30	19.359	1.02	13.1		---	0.200
19		16.831	1.01	2.71		---	0.0264
20	20/28	24.378	1.06	17.2		---	0.516
21	21/33	24.663	1.05	9.55		---	0.540
22		25.115	1.03	5.77		---	0.380
23		---	---	ND		---	0.00500
24		20.306	1.06	0.315		---	0.0200
25		23.640	1.05	1.25		---	0.100
26	26/29	23.355	1.02	2.89		---	0.0400
27		20.174	0.98	1.40		---	0.0200
28	20/28	24.378	1.06	(17.2)		---	0.516
29	26/29	23.355	1.02	(2.89)		---	0.0400
30	18/30	19.359	1.02	(13.1)		---	0.200
31		24.025	1.03	14.0		---	0.520
32		21.159	1.08	3.90		---	0.100
33	21/33	24.663	1.05	(9.55)		---	0.540
34		---	---	ND		---	0.00500
35		---	---	ND		---	0.0200
36		---	---	ND		---	0.0100
37		29.139	1.05	2.60		---	0.212
38		---	---	ND		---	0.0100
39		---	---	ND		---	0.0100
40	40/41/71	28.938	0.79	6.61		---	0.120
41	40/41/71	28.938	0.79	(6.61)		---	0.120
42		28.351	0.77	3.52		---	0.200
43	43/73	26.876	0.72	0.501		---	0.0200
44	44/47/65	27.731	0.79	12.1		---	0.600
45	45/51	24.428	0.75	3.17		---	0.0800
46		24.813	0.80	1.04		---	0.0100
47	44/47/65	27.731	0.79	(12.1)		---	0.600
48		27.513	0.74	3.49		---	0.200

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Filename P130306A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.177	0.77	7.09	---	0.400
50	50/53	23.657	0.77	2.13	---	0.0200
51	45/51	24.428	0.75	(3.17)	---	0.0800
52		26.608	0.76	10.1	---	0.492
53	50/53	23.657	0.77	(2.13)	---	0.0200
54		20.907	1.28 I	---	0.0363	0.0100
55		---	---	ND	---	0.0100
56		33.230	0.75	1.05	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.133	0.78	1.24	---	0.0300
60		33.481	0.84	0.627	---	0.200
61	61/70/74/76	32.140	0.76	5.75	---	0.800
62	59/62/75	28.133	0.78	(1.24)	---	0.0300
63		31.771	0.72	0.177	---	0.0100
64		29.189	0.83	5.11	---	0.200
65	44/47/65	27.731	0.79	(12.1)	---	0.600
66		32.526	0.83	2.25	---	0.336
67		31.503	0.90 I	---	0.213	0.0100
68		---	---	ND	---	0.0100
69	49/69	27.177	0.77	(7.09)	---	0.400
70	61/70/74/76	32.140	0.76	(5.75)	---	0.800
71	40/41/71	28.938	0.79	(6.61)	---	0.120
72		---	---	ND	---	0.0100
73	43/73	26.876	0.72	(0.501)	---	0.0200
74	61/70/74/76	32.140	0.76	(5.75)	---	0.800
75	59/62/75	28.133	0.78	(1.24)	---	0.0300
76	61/70/74/76	32.140	0.76	(5.75)	---	0.800
77		37.422	0.49 I	---	0.0660	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		36.717	0.81	0.0239	---	0.0120
82		36.952	1.26 I	---	0.190	0.0400
83		34.974	1.64	0.117	---	0.0100
84		32.325	1.43	0.838	---	0.0400
85	85/116/117	36.432	1.61	0.298	---	0.120
86	86/87/97/108/119/125	35.745	1.62	1.46	---	0.240
87	86/87/97/108/119/125	35.745	1.62	(1.46)	---	0.240
88	88/91	32.107	1.67	0.536	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	34.487	1.59	2.05	---	0.120
91	88/91	32.107	1.67	(0.536)	---	0.0200
92		33.833	1.60	0.359	---	0.0100
93	93/98/100/102	31.587	1.70	0.275	---	0.0400
94		---	---	ND	---	0.0200
95		31.151	1.58	2.18	---	0.0760
96		28.100	1.60	0.109	---	0.0100

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Basement AQ02485
Lab Sample ID 10220944008
Filename P130306A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.745	1.62	(1.46)	---	0.240
98	93/98/100/102	31.587	1.70	(0.275)	---	0.0400
99		35.141	1.52	0.968	---	0.200
100	93/98/100/102	31.587	1.70	(0.275)	---	0.0400
101	90/101/113	34.487	1.59	(2.05)	---	0.120
102	93/98/100/102	31.587	1.70	(0.275)	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		41.144	1.64	0.250	---	0.200
106		---	---	ND	---	0.0100
107	107/124	39.182	1.37	0.0396	---	0.0200
108	86/87/97/108/119/125	35.745	1.62	(1.46)	---	0.240
109		39.433	1.60	0.0522	---	0.0100
110	110/115	36.617	1.69	1.85	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.487	1.59	(2.05)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	36.617	1.69	(1.85)	---	0.400
116	85/116/117	36.432	1.61	(0.298)	---	0.120
117	85/116/117	36.432	1.61	(0.298)	---	0.120
118		39.937	1.74	0.804	---	0.256
119	86/87/97/108/119/125	35.745	1.62	(1.46)	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		39.551	2.08 I	---	0.0212	0.0100
124	107/124	39.182	1.37	(0.0396)	---	0.0200
125	86/87/97/108/119/125	35.745	1.62	(1.46)	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	44.581	1.29	0.0457	---	0.0200
129	129/138/163	43.256	1.52 I	---	0.412	0.0600
130		42.552	0.72 I	---	0.0194	0.0100
131		---	---	ND	---	0.0100
132		39.987	1.33	0.234	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	37.690	1.46 I	---	0.409	0.0200
136		34.957	1.17	0.284	---	0.0100
137		42.804	1.27	0.0353	---	0.0100
138	129/138/163	43.256	1.52 I	---	(0.412)	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		42.133	1.22	0.0965	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		38.277	1.51 I	---	0.0682	0.0100

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Minneapolis, MN 55414

Tel: 612-607-1700
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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Basement AQ02485
Lab Sample ID 10220944008
Filename P130306A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.328	1.37	0.105	---	0.0100
147	147/149	38.662	1.25	0.706	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.662	1.25	(0.706)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.690	1.46 I	---	(0.409)	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.982	1.17	0.456	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.256	1.52 I	---	(0.412)	0.0600
164		42.954	1.04 I	---	0.0239	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.581	1.29	(0.0457)	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.982	1.17	(0.456)	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		45.587	0.94	0.0506	---	0.0100
175		---	---	ND	---	0.0100
176		41.781	0.98	0.0353	---	0.0100
177		46.073	0.92	0.0321	---	0.0100
178		---	---	ND	---	0.0100
179		40.825	0.73 I	---	0.0509	0.0100
180	180/193	49.175	0.92	0.0632	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	45.386	1.14	0.0578	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	45.386	1.14	(0.0578)	---	0.0200
186		---	---	ND	---	0.0100
187		44.715	0.87 I	---	0.0871	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Basement AQ02485
Lab Sample ID 10220944008
Filename P130306A_10

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	49.175	0.92	(0.0632)	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	406 Basement AQ02485
Lab Sample ID	10220944008
Filename	P130306A_10

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.856
Total Dichloro Biphenyls	17.2
Total Trichloro Biphenyls	88.7
Total Tetrachloro Biphenyls	66.0
Total Pentachloro Biphenyls	12.2
Total Hexachloro Biphenyls	1.96
Total Heptachloro Biphenyls	0.239
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	187

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	406 Dining Room AQ02486		
Lab Sample ID	10220944009		
Filename	P130306A_11		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 12:43
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 21:34

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery	
Labeled Analytes							
13C-2-MoCB	1	8.863	2.27	2.0	0.727	40	I
13C-4-MoCB	3	12.278	2.77	2.0	1.04	52	
13C-2,2'-DiCB	4	12.613	1.58	2.0	1.37	69	
13C-4,4'-DiCB	15	20.568	1.53	2.0	1.04	52	
13C-2,2',6-TrCB	19	16.878	1.01	2.0	1.43	71	
13C-3,4,4'-TrCB	37	29.138	1.04	2.0	1.05	53	
13C-2,2',6,6'-TeCB	54	20.906	0.76	2.0	1.20	60	
13C-3,4,4',5-TeCB	81	36.767	0.81	2.0	1.04	52	
13C-3,3',4,4'-TeCB	77	37.354	0.84	2.0	1.12	56	
13C-2,2',4,6,6'-PeCB	104	27.680	1.64	2.0	1.69	84	
13C-2,3,3',4,4'-PeCB	105	41.143	1.52	2.0	1.05	52	
13C-2,3,4,4',5-PeCB	114	40.472	1.56	2.0	1.09	54	
13C-2,3',4,4',5-PeCB	118	39.902	1.58	2.0	1.08	54	
13C-2,3',4,4',5'-PeCB	123	39.550	1.60	2.0	1.07	54	
13C-3,3',4,4',5-PeCB	126	44.446	1.60	2.0	0.921	46	
13C-2,2',4,4',6,6'-HxCB	155	34.218	1.27	2.0	2.33	117	
13C-HxCB (156/157)	156/157	47.648	1.21	4.0	2.33	58	
13C-2,3',4,4',5,5'-HxCB	167	46.458	1.31	2.0	1.27	63	
13C-3,3',4,4',5,5'-HxCB	169	51.085	1.33	2.0	1.14	57	
13C-2,2',3,4',5,6,6'-HpCB	188	40.472	1.04	2.0	1.86	93	
13C-2,3,3',4,4',5,5'-HpCB	189	54.019	1.10	2.0	0.933	47	
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.173	0.89	2.0	1.85	93	
13C-2,3,3',4,4',5,5',6-OcCB	205	56.648	0.89	2.0	1.53	77	
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.575	0.79	2.0	2.36	118	
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.394	0.81	2.0	1.47	74	
13C--DeCB	209	58.480	0.70	2.0	2.40	120	
Cleanup Standards							
13C-2,4,4'-TrCB	28	24.393	1.07	2.0	1.11	55	
13C-2,3,3',5,5'-PeCB	111	37.454	1.55	2.0	1.54	77	
13C-2,2',3,3',5,5',6-HpCB	178	43.725	1.04	2.0	2.24	112	
Recovery Standards							
13C-2,5-DiCB	9	15.405	1.56	2.0	NA	NA	
13C-2,2',5,5'-TeCB	52	26.607	0.83	2.0	NA	NA	
13C-2,2',4,5,5'-PeCB	101	34.453	1.66	2.0	NA	NA	
13C-2,2',3,4,4',5'-HxCB	138	43.222	1.23	2.0	NA	NA	
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.390	0.90	2.0	NA	NA	

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Dining Room AQ02486
Lab Sample ID 10220944009
Filename P130306A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		8.839	3.08	0.839	---	0.0200
2		12.110	2.87	0.331	---	0.0200
3		12.314	3.16	1.34	---	0.0200
4		12.625	1.57	13.7	---	0.100
5		16.339	1.52	0.997	---	0.0200
6		15.956	1.53	6.56	---	0.0200
7		15.632	1.54	1.29	---	0.0200
8		16.519	1.56	30.4	---	0.250
9		15.429	1.57	2.21	---	0.0200
10		12.853	1.53	2.44	---	0.0200
11		19.814	1.58	2.25	---	0.139
12	12/13	20.173	1.52	2.48	---	0.0100
13	12/13	20.173	1.52	(2.48)	---	0.0100
14		---	---	ND	---	0.0100
15		20.592	1.57	20.0	---	0.132
16		20.508	1.03	28.5	---	0.100
17		19.945	1.02	29.7	---	0.100
18	18/30	19.406	1.02	53.6	---	0.200
19		16.890	1.02	11.6	---	0.0264
20	20/28	24.410	1.06	65.5	---	0.516
21	21/33	24.695	1.04	39.6	---	0.540
22		25.148	1.04	23.7	---	0.380
23		23.002	1.10	0.0946	---	0.00500
24		20.377	0.91	1.50	---	0.0200
25		23.673	1.10	4.89	---	0.100
26	26/29	23.388	1.07	11.4	---	0.0400
27		20.221	1.03	5.57	---	0.0200
28	20/28	24.410	1.06	(65.5)	---	0.516
29	26/29	23.388	1.07	(11.4)	---	0.0400
30	18/30	19.406	1.02	(53.6)	---	0.200
31		24.058	1.05	52.2	---	0.520
32		21.208	1.05	16.5	---	0.100
33	21/33	24.695	1.04	(39.6)	---	0.540
34		22.817	1.06	0.212	---	0.00500
35		28.685	1.05	0.649	---	0.0200
36		---	---	ND	---	0.0100
37		29.155	1.04	10.3	---	0.212
38		28.149	1.26 I	---	0.0577	0.0100
39		27.545	1.04	0.190	---	0.0100
40	40/41/71	28.971	0.78	24.1	---	0.120
41	40/41/71	28.971	0.78	(24.1)	---	0.120
42		28.384	0.79	12.6	---	0.200
43	43/73	26.892	0.80	1.73	---	0.0200
44	44/47/65	27.764	0.77	40.6	---	0.600
45	45/51	24.477	0.76	12.1	---	0.0800
46		24.846	0.78	4.01	---	0.0100
47	44/47/65	27.764	0.77	(40.6)	---	0.600
48		27.529	0.77	11.9	---	0.200

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IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.210	0.77	24.6	---	0.400
50	50/53	23.689	0.77	7.83	---	0.0200
51	45/51	24.477	0.76	(12.1)	---	0.0800
52		26.623	0.78	33.9	---	0.492
53	50/53	23.689	0.77	(7.83)	---	0.0200
54		20.940	0.86	0.160	---	0.0100
55		---	---	ND	---	0.0100
56		33.263	0.82	4.03	---	0.200
57		31.033	0.59 I	---	0.102	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.149	0.78	4.22	---	0.0300
60		33.481	0.77	2.40	---	0.200
61	61/70/74/76	32.156	0.78	19.6	---	0.800
62	59/62/75	28.149	0.78	(4.22)	---	0.0300
63		31.804	0.79	0.561	---	0.0100
64		29.222	0.78	17.4	---	0.200
65	44/47/65	27.764	0.77	(40.6)	---	0.600
66		32.525	0.79	8.58	---	0.336
67		31.519	0.76	0.680	---	0.0100
68		30.563	0.77	0.0552	---	0.0100
69	49/69	27.210	0.77	(24.6)	---	0.400
70	61/70/74/76	32.156	0.78	(19.6)	---	0.800
71	40/41/71	28.971	0.78	(24.1)	---	0.120
72		30.228	0.58 I	---	0.0800	0.0100
73	43/73	26.892	0.80	(1.73)	---	0.0200
74	61/70/74/76	32.156	0.78	(19.6)	---	0.800
75	59/62/75	28.149	0.78	(4.22)	---	0.0300
76	61/70/74/76	32.156	0.78	(19.6)	---	0.800
77		37.370	0.80	0.305	---	0.0400
78		---	---	ND	---	0.0100
79		35.677	1.14 I	---	0.0313	0.0100
80		---	---	ND	---	0.0100
81		36.784	0.66	0.0465	---	0.0120
82		36.951	1.48	0.451	---	0.0400
83		34.990	1.34	0.263	---	0.0100
84		32.357	1.51	2.08	---	0.0400
85	85/116/117	36.448	1.48	0.788	---	0.120
86	86/87/97/108/119/125	35.761	1.59	3.00	---	0.240
87	86/87/97/108/119/125	35.761	1.59	(3.00)	---	0.240
88	88/91	32.139	1.58	1.33	---	0.0200
89		32.894	1.80 I	---	0.174	0.0100
90	90/101/113	34.487	1.53	4.95	---	0.120
91	88/91	32.139	1.58	(1.33)	---	0.0200
92		33.850	1.56	0.843	---	0.0100
93	93/98/100/102	31.569	1.70	0.735	---	0.0400
94		30.647	1.36	0.103	---	0.0200
95		31.150	1.54	6.33	---	0.0760
96		28.115	1.36	0.326	---	0.0100

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Dining Room AQ02486
Lab Sample ID 10220944009
Filename P130306A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	35.761	1.59	(3.00)	---	0.240
98	93/98/100/102	31.569	1.70	(0.735)	---	0.0400
99		35.141	1.60	2.13	---	0.200
100	93/98/100/102	31.569	1.70	(0.735)	---	0.0400
101	90/101/113	34.487	1.53	(4.95)	---	0.120
102	93/98/100/102	31.569	1.70	(0.735)	---	0.0400
103		30.413	1.67	0.0771	---	0.0100
104		---	---	ND	---	0.0100
105		41.160	1.51	0.499	---	0.200
106		---	---	ND	---	0.0100
107	107/124	39.198	1.29 I	---	0.0660	0.0200
108	86/87/97/108/119/125	35.761	1.59	(3.00)	---	0.240
109		39.450	1.45	0.0908	---	0.0100
110	110/115	36.633	1.54	3.86	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.487	1.53	(4.95)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	36.633	1.54	(3.86)	---	0.400
116	85/116/117	36.448	1.48	(0.788)	---	0.120
117	85/116/117	36.448	1.48	(0.788)	---	0.120
118		39.936	1.57	1.50	---	0.256
119	86/87/97/108/119/125	35.761	1.59	(3.00)	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		39.584	1.75	0.0464	---	0.0100
124	107/124	39.198	1.29 I	---	(0.0660)	0.0200
125	86/87/97/108/119/125	35.761	1.59	(3.00)	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	44.580	1.23	0.0965	---	0.0200
129	129/138/163	43.272	1.32	1.49	---	0.0600
130		42.551	1.11	0.0724	---	0.0100
131		---	---	ND	---	0.0100
132		40.003	1.15	0.736	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	38.880	1.38	0.155	---	0.0200
135	135/151	37.672	1.22	1.56	---	0.0200
136		34.973	1.20	0.732	---	0.0100
137		42.803	1.38	0.0334	---	0.0100
138	129/138/163	43.272	1.32	(1.49)	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		42.166	1.31	0.393	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	38.880	1.38	(0.155)	---	0.0200
144		38.293	1.33	0.208	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Dining Room AQ02486
Lab Sample ID 10220944009
Filename P130306A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.277	1.15	0.261	---	0.0100
147	147/149	38.678	1.25	2.48	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.678	1.25	(2.48)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.672	1.22	(1.56)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.948	1.27	1.66	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	47.648	1.29	0.0482	---	0.0200
157	156/157	47.648	1.29	(0.0482)	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.272	1.32	(1.49)	---	0.0600
164		42.954	1.10	0.107	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.580	1.23	(0.0965)	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.948	1.27	(1.66)	---	0.0400
169		---	---	ND	---	0.0120
170		50.465	0.70 I	---	0.0569	0.0100
171	171/173	46.726	1.34 I	---	0.0448	0.0200
172		---	---	ND	---	0.0100
173	171/173	46.726	1.34 I	---	(0.0448)	0.0200
174		45.619	1.00	0.192	---	0.0100
175		---	---	ND	---	0.0100
176		41.763	0.96	0.0985	---	0.0100
177		46.056	0.96	0.119	---	0.0100
178		43.792	0.94	0.0774	---	0.0100
179		40.808	1.00	0.314	---	0.0100
180	180/193	49.157	1.14	0.249	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	45.368	1.44 I	---	0.144	0.0200
184		---	---	ND	---	0.0100
185	183/185	45.368	1.44 I	---	(0.144)	0.0200
186		---	---	ND	---	0.0100
187		44.731	1.00	0.447	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		51.035	0.96	0.0192	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 406 Dining Room AQ02486
Lab Sample ID 10220944009
Filename P130306A_11

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	49.157	1.14	(0.249)	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	51.203	0.80	0.0461	---	0.0300
199	198/199	51.203	0.80	(0.0461)	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		47.179	0.85	0.0177	---	0.0150
202		46.223	0.83	0.0358	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	406 Dining Room AQ02486
Lab Sample ID	10220944009
Filename	P130306A_11

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	2.51
Total Dichloro Biphenyls	82.3
Total Trichloro Biphenyls	356
Total Tetrachloro Biphenyls	231
Total Pentachloro Biphenyls	29.4
Total Hexachloro Biphenyls	10.0
Total Heptachloro Biphenyls	1.52
Total Octachloro Biphenyls	0.0996
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	713

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	410 Basement AQ02487		
Lab Sample ID	10220944010		
Filename	P130306A_12		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 13:14
ICAL ID	P130306A02	Received	02/23/2013 09:30
CCal Filename(s)	P130306A_01	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/06/2013 22:36

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.791	2.69	2.0	0.653	33
13C-4-MoCB	3	12.134	2.96	2.0	0.844	42
13C-2,2'-DiCB	4	12.481	1.56	2.0	1.11	55
13C-4,4'-DiCB	15	20.545	1.52	2.0	0.763	38
13C-2,2',6-TrCB	19	16.843	1.00	2.0	1.14	57
13C-3,4,4'-TrCB	37	29.106	1.03	2.0	0.792	40
13C-2,2',6,6'-TeCB	54	20.890	0.78	2.0	1.09	54
13C-3,4,4',5-TeCB	81	36.735	0.76	2.0	0.897	45
13C-3,3',4,4'-TeCB	77	37.339	0.77	2.0	0.947	47
13C-2,2',4,6,6'-PeCB	104	27.664	1.65	2.0	1.46	73
13C-2,3,3',4,4'-PeCB	105	41.145	1.60	2.0	1.02	51
13C-2,3,4,4',5-PeCB	114	40.457	1.49	2.0	1.03	51
13C-2,3',4,4',5-PeCB	118	39.904	1.58	2.0	1.01	51
13C-2,3',4,4',5'-PeCB	123	39.552	1.56	2.0	1.00	50
13C-3,3',4,4',5-PeCB	126	44.481	1.53	2.0	1.01	50
13C-2,2',4,4',6,6'-HxCB	155	34.220	1.21	2.0	1.64	82
13C-HxCB (156/157)	156/157	47.667	1.38	4.0	2.09	52
13C-2,3',4,4',5,5'-HxCB	167	46.476	1.25	2.0	1.10	55
13C-3,3',4,4',5,5'-HxCB	169	51.087	1.34	2.0	1.05	52
13C-2,2',3,4',5,6,6'-HpCB	188	40.457	1.05	2.0	1.42	71
13C-2,3,3',4,4',5,5'-HpCB	189	54.000	0.93	2.0	0.892	45
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.191	0.90	2.0	1.52	76
13C-2,3,3',4,4',5,5',6-OcCB	205	56.650	0.92	2.0	1.42	71
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.577	0.78	2.0	2.12	106
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.375	0.81	2.0	1.38	69
13C--DeCB	209	58.504	0.73	2.0	2.15	108
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.361	1.02	2.0	0.811	41
13C-2,3,3',5,5'-PeCB	111	37.439	1.55	2.0	1.37	68
13C-2,2',3,3',5,5',6-HpCB	178	43.760	1.08	2.0	2.00	100
Recovery Standards						
13C-2,5-DiCB	9	15.441	1.56	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.574	0.77	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.438	1.65	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.240	1.24	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.392	0.90	2.0	NA	NA

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Basement AQ02487
Lab Sample ID 10220944010
Filename P130306A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		---	---	ND	---	0.0200
2		---	---	ND	---	0.0200
3		12.146	3.40	0.0224	---	0.0200
4		---	---	ND	---	0.100
5		---	---	ND	---	0.0200
6		16.507	1.34	0.0474	---	0.0200
7		---	---	ND	---	0.0200
8		---	---	ND	---	0.250
9		---	---	ND	---	0.0200
10		12.733	1.34	0.600	---	0.0200
11		---	---	ND	---	0.139
12	12/13	---	---	ND	---	0.0100
13	12/13	---	---	ND	---	0.0100
14		---	---	ND	---	0.0100
15		---	---	ND	---	0.132
16		---	---	ND	---	0.100
17		19.922	1.10	0.167	---	0.100
18	18/30	19.359	1.17	0.233	---	0.200
19		16.879	1.03	3.85	---	0.0264
20	20/28	---	---	ND	---	0.516
21	21/33	---	---	ND	---	0.540
22		---	---	ND	---	0.380
23		---	---	ND	---	0.00500
24		20.354	0.67 I	---	0.181	0.0200
25		---	---	ND	---	0.100
26	26/29	23.355	1.19	0.0752	---	0.0400
27		20.198	0.97	0.670	---	0.0200
28	20/28	---	---	ND	---	0.516
29	26/29	23.355	1.19	(0.0752)	---	0.0400
30	18/30	19.359	1.17	(0.233)	---	0.200
31		---	---	ND	---	0.520
32		21.192	1.02	1.24	---	0.100
33	21/33	---	---	ND	---	0.540
34		---	---	ND	---	0.00500
35		---	---	ND	---	0.0200
36		---	---	ND	---	0.0100
37		---	---	ND	---	0.212
38		---	---	ND	---	0.0100
39		---	---	ND	---	0.0100
40	40/41/71	28.955	0.79	1.12	---	0.120
41	40/41/71	28.955	0.79	(1.12)	---	0.120
42		28.335	0.85	0.704	---	0.200
43	43/73	26.860	0.77	0.110	---	0.0200
44	44/47/65	27.731	0.79	2.14	---	0.600
45	45/51	24.428	0.79	2.26	---	0.0800
46		24.831	0.81	0.880	---	0.0100
47	44/47/65	27.731	0.79	(2.14)	---	0.600
48		27.497	0.72	0.352	---	0.200

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IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.178	0.79	1.97	---	0.400
50	50/53	23.640	0.72	2.16	---	0.0200
51	45/51	24.428	0.79	(2.26)	---	0.0800
52		26.608	0.78	3.02	---	0.492
53	50/53	23.640	0.72	(2.16)	---	0.0200
54		20.907	0.49 I	---	0.0463	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.117	0.75	0.316	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	28.117	0.75	(0.316)	---	0.0300
63		---	---	ND	---	0.0100
64		29.174	0.76	0.578	---	0.200
65	44/47/65	27.731	0.79	(2.14)	---	0.600
66		---	---	ND	---	0.336
67		---	---	ND	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	27.178	0.79	(1.97)	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	28.955	0.79	(1.12)	---	0.120
72		---	---	ND	---	0.0100
73	43/73	26.860	0.77	(0.110)	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	28.117	0.75	(0.316)	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		32.342	2.26 I	---	0.177	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	32.108	1.41	0.134	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	---	---	ND	---	0.120
91	88/91	32.108	1.41	(0.134)	---	0.0200
92		33.818	1.50	0.0348	---	0.0100
93	93/98/100/102	---	---	ND	---	0.0400
94		---	---	ND	---	0.0200
95		31.135	1.44	0.743	---	0.0760
96		28.083	1.45	0.0452	---	0.0100

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Basement AQ02487
Lab Sample ID 10220944010
Filename P130306A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	---	---	ND	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	---	---	ND	---	0.0400
101	90/101/113	---	---	ND	---	0.120
102	93/98/100/102	---	---	ND	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	---	---	ND	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	44.582	1.08	0.0356	---	0.0200
129	129/138/163	43.274	1.26	0.119	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		40.005	1.38	0.142	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	37.691	1.17	0.161	---	0.0200
136		34.958	1.25	0.0787	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	43.274	1.26	(0.119)	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		38.278	1.53 I	---	0.0219	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Basement AQ02487
Lab Sample ID 10220944010
Filename P130306A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.312	1.95 I	---	0.0188	0.0100
147	147/149	38.646	1.21	0.306	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.646	1.21	(0.306)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.691	1.17	(0.161)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.949	1.22	0.0490	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.274	1.26	(0.119)	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	44.582	1.08	(0.0356)	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.949	1.22	(0.0490)	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		41.748	0.86 I	---	0.0130	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		40.809	0.82 I	---	0.0124	0.0100
180	180/193	---	---	ND	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		44.749	1.53 I	---	0.0376	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Basement AQ02487
Lab Sample ID 10220944010
Filename P130306A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		46.258	0.82	0.0259	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		53.417	1.10 I	---	0.0214	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	410 Basement AQ02487
Lab Sample ID	10220944010
Filename	P130306A_12

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.0224
Total Dichloro Biphenyls	0.647
Total Trichloro Biphenyls	6.24
Total Tetrachloro Biphenyls	15.6
Total Pentachloro Biphenyls	0.957
Total Hexachloro Biphenyls	0.892
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	0.0259
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	24.4

ND = Not Detected

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client - Pace Analytical

Client's Sample ID	410 Living Room AQ02488		
Lab Sample ID	10220944011		
Filename	P130307A_12		
Injected By	CVS		
Total Amount Extracted	1.00 Sample	Matrix	PUF
% Moisture	NA	Dilution	3
Dry Weight Extracted	NA	Collected	02/21/2013 13:23
ICAL ID	P130307A05	Received	02/23/2013 09:30
CCal Filename(s)	P130307A_04	Extracted	02/28/2013 12:30
Method Blank ID	BLANK-35566	Analyzed	03/07/2013 22:08

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.815	3.05	2.0	1.09	55
13C-4-MoCB	3	12.170	2.73	2.0	0.961	48
13C-2,2'-DiCB	4	12.494	1.59	2.0	0.767	38
13C-4,4'-DiCB	15	20.533	1.62	2.0	1.01	50
13C-2,2',6-TrCB	19	16.795	1.07	2.0	1.02	51
13C-3,4,4'-TrCB	37	29.107	1.06	2.0	1.26	63
13C-2,2',6,6'-TeCB	54	20.874	0.82	2.0	1.05	52
13C-3,4,4',5-TeCB	81	36.737	0.81	2.0	1.30	65
13C-3,3',4,4'-TeCB	77	37.341	0.80	2.0	1.35	68
13C-2,2',4,6,6'-PeCB	104	27.665	1.60	2.0	1.19	60
13C-2,3,3',4,4'-PeCB	105	41.131	1.60	2.0	1.45	72
13C-2,3,4,4',5-PeCB	114	40.460	1.62	2.0	1.44	72
13C-2,3',4,4',5-PeCB	118	39.890	1.63	2.0	1.41	71
13C-2,3',4,4',5'-PeCB	123	39.538	1.60	2.0	1.39	69
13C-3,3',4,4',5-PeCB	126	44.468	1.59	2.0	1.28	64
13C-2,2',4,4',6,6'-HxCB	155	34.205	1.32	2.0	1.51	76
13C-HxCB (156/157)	156/157	47.654	1.28	4.0	3.25	81
13C-2,3',4,4',5,5'-HxCB	167	46.464	1.27	2.0	1.66	83
13C-3,3',4,4',5,5'-HxCB	169	51.092	1.27	2.0	1.65	83
13C-2,2',3,4',5,6,6'-HpCB	188	40.443	1.03	2.0	1.25	63
13C-2,3,3',4,4',5,5'-HpCB	189	54.009	1.06	2.0	1.26	63
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.179	0.89	2.0	1.34	67
13C-2,3,3',4,4',5,5',6-OcCB	205	56.661	0.89	2.0	1.53	76
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.588	0.78	2.0	1.77	88
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.384	0.81	2.0	1.30	65
13C--DeCB	209	58.493	0.72	2.0	1.53	77
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.361	1.07	2.0	1.32	66
13C-2,3,3',5,5'-PeCB	111	37.442	1.59	2.0	1.39	69
13C-2,2',3,3',5,5',6-HpCB	178	43.730	1.08	2.0	1.75	88
Recovery Standards						
13C-2,5-DiCB	9	15.274	1.60	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.575	0.82	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.457	1.61	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.227	1.29	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.381	0.89	2.0	NA	NA

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Living Room AQ02488
Lab Sample ID 10220944011
Filename P130307A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S		EMPC ng/S	EML ng/S
1		---	---	ND		---	0.0200
2		11.955	2.91	0.0331	B	---	0.0200
3		12.206	3.52	0.107		---	0.0200
4		12.506	1.63	0.282		---	0.100
5		---	---	ND		---	0.0200
6		15.861	1.39	0.138		---	0.0200
7		15.513	1.63	0.0307		---	0.0200
8		16.448	1.51	0.326		---	0.250
9		15.298	1.26 I	---		0.0283	0.0200
10		12.745	1.63	0.558		---	0.0200
11		19.754	1.61	1.05	B	---	0.139
12	12/13	20.162	1.60	0.0654		---	0.0100
13	12/13	20.162	1.60	(0.0654)		---	0.0100
14		---	---	ND		---	0.0100
15		20.557	1.48	0.200		---	0.132
16		20.462	0.92	0.190		---	0.100
17		19.886	1.08	0.302		---	0.100
18	18/30	19.347	1.03	0.520		---	0.200
19		16.807	1.06	3.80		---	0.0264
20	20/28	24.378	1.07	0.958		---	0.516
21	21/33	---	---	ND		---	0.540
22		---	---	ND		---	0.380
23		---	---	ND		---	0.00500
24		20.330	1.01	0.173		---	0.0200
25		23.640	1.13	0.115		---	0.100
26	26/29	23.355	1.06	0.208		---	0.0400
27		20.162	1.10	0.598		---	0.0200
28	20/28	24.378	1.07	(0.958)		---	0.516
29	26/29	23.355	1.06	(0.208)		---	0.0400
30	18/30	19.347	1.03	(0.520)		---	0.200
31		24.026	1.07	0.618		---	0.520
32		21.159	1.06	1.74		---	0.100
33	21/33	---	---	ND		---	0.540
34		---	---	ND		---	0.00500
35		---	---	ND		---	0.0200
36		---	---	ND		---	0.0100
37		---	---	ND		---	0.212
38		---	---	ND		---	0.0100
39		---	---	ND		---	0.0100
40	40/41/71	28.940	0.77	0.856		---	0.120
41	40/41/71	28.940	0.77	(0.856)		---	0.120
42		28.353	0.75	0.567		---	0.200
43	43/73	26.877	0.76	0.0592		---	0.0200
44	44/47/65	27.732	0.80	1.70		---	0.600
45	45/51	24.445	0.78	1.36		---	0.0800
46		24.814	0.77	0.461		---	0.0100
47	44/47/65	27.732	0.80	(1.70)		---	0.600
48		27.514	0.79	0.380		---	0.200

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

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Lab Sample ID 10220944011
Filename P130307A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
49	49/69	27.179	0.78	1.51	---	0.400
50	50/53	23.640	0.80	1.23	---	0.0200
51	45/51	24.445	0.78	(1.36)	---	0.0800
52		26.608	0.77	2.22	---	0.492
53	50/53	23.640	0.80	(1.23)	---	0.0200
54		20.907	1.01 I	---	0.0488	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	28.118	0.79	0.209	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	28.118	0.79	(0.209)	---	0.0300
63		---	---	ND	---	0.0100
64		29.208	0.79	0.536	---	0.200
65	44/47/65	27.732	0.80	(1.70)	---	0.600
66		---	---	ND	---	0.336
67		---	---	ND	---	0.0100
68		30.549	0.86	0.0202	---	0.0100
69	49/69	27.179	0.78	(1.51)	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	28.940	0.77	(0.856)	---	0.120
72		---	---	ND	---	0.0100
73	43/73	26.877	0.76	(0.0592)	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	28.118	0.79	(0.209)	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		32.327	1.75	0.0903	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	32.092	1.45	0.0530	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	34.490	1.42	0.183	---	0.120
91	88/91	32.092	1.45	(0.0530)	---	0.0200
92		33.836	1.65	0.0354	---	0.0100
93	93/98/100/102	---	---	ND	---	0.0400
94		---	---	ND	---	0.0200
95		31.136	1.75	0.317	---	0.0760
96		28.084	1.42	0.0170	---	0.0100

Conc = Concentration
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R = Recovery outside of Method 1668A control limits
Nn = Value obtained from additional analyses

ND = Not Detected
NA = Not Applicable
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* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference
ng's = Nanograms

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Living Room AQ02488
Lab Sample ID 10220944011
Filename P130307A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	---	---	ND	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	---	---	ND	---	0.0400
101	90/101/113	34.490	1.42	(0.183)	---	0.120
102	93/98/100/102	---	---	ND	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	34.490	1.42	(0.183)	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	43.261	1.23	0.102	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		39.957	1.45 I	---	0.0362	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	37.660	1.24	0.0877	---	0.0200
136		34.977	1.36	0.0353	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	43.261	1.23	(0.102)	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		42.137	1.27	0.0310	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		38.280	1.46 I	---	0.0109	0.0100

Conc = Concentration
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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Living Room AQ02488
Lab Sample ID 10220944011
Filename P130307A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
145		---	---	ND	---	0.0400
146		41.299	1.23	0.0191	---	0.0100
147	147/149	38.666	1.40	0.168	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	38.666	1.40	(0.168)	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	37.660	1.24	(0.0877)	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	41.936	1.18	0.130	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	43.261	1.23	(0.102)	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	41.936	1.18	(0.130)	---	0.0400
169		---	---	ND	---	0.0120
170		50.455	0.99	0.0204	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		45.575	0.92	0.0561	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		46.044	1.21 I	---	0.0189	0.0100
178		43.747	0.99	0.0133	---	0.0100
179		40.812	1.03	0.0450	---	0.0100
180	180/193	49.164	1.13	0.106	---	0.0400
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	45.407	1.11	0.0522	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	45.407	1.11	(0.0522)	---	0.0200
186		---	---	ND	---	0.0100
187		44.736	1.04	0.110	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100

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Method 1668C Polychlorobiphenyl
Sample Analysis Results

Client Sample ID 410 Living Room AQ02488
Lab Sample ID 10220944011
Filename P130307A_12

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
193	180/193	49.164	1.13	(0.106)	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		51.914	0.86	0.0171	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	51.243	0.98	0.0402	---	0.0300
199	198/199	51.243	0.98	(0.0402)	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		46.162	0.80	0.0246	---	0.0150
203		52.165	0.66 I	---	0.0204	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	0.0150
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

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Method 1668C Polychlorobiphenyl Sample Analysis Results

Client Sample ID	410 Living Room AQ02488
Lab Sample ID	10220944011
Filename	P130307A_12

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.140
Total Dichloro Biphenyls	2.65
Total Trichloro Biphenyls	9.23
Total Tetrachloro Biphenyls	11.1
Total Pentachloro Biphenyls	0.696
Total Hexachloro Biphenyls	0.572
Total Heptachloro Biphenyls	0.403
Total Octachloro Biphenyls	0.0820
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	24.9

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID	BLANK-35566		
Filename	P130305B_06		
Injected By	CVS	Matrix	PUF
Total Amount Extracted	1.00 Sample	Extracted	02/28/2013 12:30
ICAL ID	P130305B02	Analyzed	03/06/2013 03:38
CCal Filename(s)	P130305B_01	Dilution	3

PCB Isomer	IUPAC	RT	Ratio	ng's Added	ng's Found	% Recovery
Labeled Analytes						
13C-2-MoCB	1	8.467	2.79	2.0	0.539	27
13C-4-MoCB	3	11.846	3.09	2.0	0.638	32
13C-2,2'-DiCB	4	12.193	1.54	2.0	0.529	26
13C-4,4'-DiCB	15	20.472	1.55	2.0	0.666	33
13C-2,2',6-TrCB	19	16.674	1.11	2.0	0.646	32
13C-3,4,4'-TrCB	37	29.105	1.07	2.0	1.01	51
13C-2,2',6,6'-TeCB	54	20.788	0.81	2.0	0.828	41
13C-3,4,4',5-TeCB	81	36.718	0.84	2.0	1.10	55
13C-3,3',4,4'-TeCB	77	37.338	0.79	2.0	1.18	59
13C-2,2',4,6,6'-PeCB	104	27.629	1.54	2.0	0.995	50
13C-2,3,3',4,4'-PeCB	105	41.128	1.60	2.0	1.28	64
13C-2,3,4,4',5-PeCB	114	40.457	1.63	2.0	1.32	66
13C-2,3',4,4',5-PeCB	118	39.887	1.62	2.0	1.30	65
13C-2,3',4,4',5'-PeCB	123	39.535	1.57	2.0	1.29	65
13C-3,3',4,4',5-PeCB	126	44.465	1.61	2.0	1.14	57
13C-2,2',4,4',6,6'-HxCB	155	34.202	1.32	2.0	1.29	64
13C-HxCB (156/157)	156/157	47.668	1.28	4.0	3.04	76
13C-2,3',4,4',5,5'-HxCB	167	46.460	1.28	2.0	1.49	75
13C-3,3',4,4',5,5'-HxCB	169	51.105	1.28	2.0	1.45	73
13C-2,2',3,4',5,6,6'-HpCB	188	40.440	1.06	2.0	1.11	55
13C-2,3,3',4,4',5,5'-HpCB	189	54.006	1.09	2.0	1.17	59
13C-2,2',3,3',5,5',6,6'-OcCB	202	46.175	0.92	2.0	1.19	59
13C-2,3,3',4,4',5,5',6-OcCB	205	56.657	0.90	2.0	1.38	69
13C-2,2',3,3',4,4',5,5',6-NoCB	206	57.583	0.78	2.0	1.59	79
13C-2,2',3,3',4,5,5',6,6'-NoCB	208	53.381	0.84	2.0	1.19	59
13C--DeCB	209	58.489	0.68	2.0	1.34	67
Cleanup Standards						
13C-2,4,4'-TrCB	28	24.309	1.08	2.0	1.07	54
13C-2,3,3',5,5'-PeCB	111	37.422	1.64	2.0	1.29	64
13C-2,2',3,3',5,5',6-HpCB	178	43.727	1.09	2.0	1.59	80
Recovery Standards						
13C-2,5-DiCB	9	15.129	1.58	2.0	NA	NA
13C-2,2',5,5'-TeCB	52	26.539	0.81	2.0	NA	NA
13C-2,2',4,5,5'-PeCB	101	34.437	1.67	2.0	NA	NA
13C-2,2',3,4,4',5'-HxCB	138	43.224	1.32	2.0	NA	NA
13C-2,2',3,3',4,4',5,5'-OcCB	194	56.376	0.91	2.0	NA	NA

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REPORT OF LABORATORY ANALYSIS

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1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-35566
Filename P130305B_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
1		---	---	ND	---	0.0200
2		11.606	2.88	0.0286	---	0.0200
3		---	---	ND	---	0.0200
4		---	---	ND	---	0.100
5		---	---	ND	---	0.0200
6		---	---	ND	---	0.0200
7		---	---	ND	---	0.0200
8		---	---	ND	---	0.250
9		---	---	ND	---	0.0200
10		---	---	ND	---	0.0200
11		19.681	1.56	0.189	---	0.139
12	12/13	---	---	ND	---	0.0100
13	12/13	---	---	ND	---	0.0100
14		---	---	ND	---	0.0100
15		---	---	ND	---	0.132
16		---	---	ND	---	0.100
17		---	---	ND	---	0.100
18	18/30	---	---	ND	---	0.200
19		---	---	ND	---	0.0264
20	20/28	---	---	ND	---	0.516
21	21/33	---	---	ND	---	0.540
22		---	---	ND	---	0.380
23		---	---	ND	---	0.00500
24		---	---	ND	---	0.0200
25		---	---	ND	---	0.100
26	26/29	---	---	ND	---	0.0400
27		---	---	ND	---	0.0200
28	20/28	---	---	ND	---	0.516
29	26/29	---	---	ND	---	0.0400
30	18/30	---	---	ND	---	0.200
31		---	---	ND	---	0.520
32		---	---	ND	---	0.100
33	21/33	---	---	ND	---	0.540
34		---	---	ND	---	0.00500
35		---	---	ND	---	0.0200
36		---	---	ND	---	0.0100
37		---	---	ND	---	0.212
38		---	---	ND	---	0.0100
39		---	---	ND	---	0.0100
40	40/41/71	---	---	ND	---	0.120
41	40/41/71	---	---	ND	---	0.120
42		---	---	ND	---	0.200
43	43/73	---	---	ND	---	0.0200
44	44/47/65	---	---	ND	---	0.600
45	45/51	---	---	ND	---	0.0800

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
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R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-35566
Filename P130305B_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
46		---	---	ND	---	0.0100
47	44/47/65	---	---	ND	---	0.600
48		---	---	ND	---	0.200
49	49/69	---	---	ND	---	0.400
50	50/53	---	---	ND	---	0.0200
51	45/51	---	---	ND	---	0.0800
52		---	---	ND	---	0.492
53	50/53	---	---	ND	---	0.0200
54		---	---	ND	---	0.0100
55		---	---	ND	---	0.0100
56		---	---	ND	---	0.200
57		---	---	ND	---	0.0100
58		---	---	ND	---	0.0100
59	59/62/75	---	---	ND	---	0.0300
60		---	---	ND	---	0.200
61	61/70/74/76	---	---	ND	---	0.800
62	59/62/75	---	---	ND	---	0.0300
63		---	---	ND	---	0.0100
64		---	---	ND	---	0.200
65	44/47/65	---	---	ND	---	0.600
66		---	---	ND	---	0.336
67		---	---	ND	---	0.0100
68		---	---	ND	---	0.0100
69	49/69	---	---	ND	---	0.400
70	61/70/74/76	---	---	ND	---	0.800
71	40/41/71	---	---	ND	---	0.120
72		---	---	ND	---	0.0100
73	43/73	---	---	ND	---	0.0200
74	61/70/74/76	---	---	ND	---	0.800
75	59/62/75	---	---	ND	---	0.0300
76	61/70/74/76	---	---	ND	---	0.800
77		---	---	ND	---	0.0400
78		---	---	ND	---	0.0100
79		---	---	ND	---	0.0100
80		---	---	ND	---	0.0100
81		---	---	ND	---	0.0120
82		---	---	ND	---	0.0400
83		---	---	ND	---	0.0100
84		---	---	ND	---	0.0400
85	85/116/117	---	---	ND	---	0.120
86	86/87/97/108/119/125	---	---	ND	---	0.240
87	86/87/97/108/119/125	---	---	ND	---	0.240
88	88/91	---	---	ND	---	0.0200
89		---	---	ND	---	0.0100
90	90/101/113	---	---	ND	---	0.120

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
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REPORT OF LABORATORY ANALYSIS

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Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-35566
Filename P130305B_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
91	88/91	---	---	ND	---	0.0200
92		---	---	ND	---	0.0100
93	93/98/100/102	---	---	ND	---	0.0400
94		---	---	ND	---	0.0200
95		---	---	ND	---	0.0760
96		---	---	ND	---	0.0100
97	86/87/97/108/119/125	---	---	ND	---	0.240
98	93/98/100/102	---	---	ND	---	0.0400
99		---	---	ND	---	0.200
100	93/98/100/102	---	---	ND	---	0.0400
101	90/101/113	---	---	ND	---	0.120
102	93/98/100/102	---	---	ND	---	0.0400
103		---	---	ND	---	0.0100
104		---	---	ND	---	0.0100
105		---	---	ND	---	0.200
106		---	---	ND	---	0.0100
107	107/124	---	---	ND	---	0.0200
108	86/87/97/108/119/125	---	---	ND	---	0.240
109		---	---	ND	---	0.0100
110	110/115	---	---	ND	---	0.0400
111		---	---	ND	---	0.0100
112		---	---	ND	---	0.0100
113	90/101/113	---	---	ND	---	0.120
114		---	---	ND	---	0.0100
115	110/115	---	---	ND	---	0.0400
116	85/116/117	---	---	ND	---	0.120
117	85/116/117	---	---	ND	---	0.120
118		---	---	ND	---	0.256
119	86/87/97/108/119/125	---	---	ND	---	0.240
120		---	---	ND	---	0.0100
121		---	---	ND	---	0.0100
122		---	---	ND	---	0.0100
123		---	---	ND	---	0.0100
124	107/124	---	---	ND	---	0.0200
125	86/87/97/108/119/125	---	---	ND	---	0.240
126		---	---	ND	---	0.0100
127		---	---	ND	---	0.0100
128	128/166	---	---	ND	---	0.0200
129	129/138/163	---	---	ND	---	0.0600
130		---	---	ND	---	0.0100
131		---	---	ND	---	0.0100
132		---	---	ND	---	0.0100
133		---	---	ND	---	0.0100
134	134/143	---	---	ND	---	0.0200
135	135/151	---	---	ND	---	0.0200

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-35566
Filename P130305B_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
136		---	---	ND	---	0.0100
137		---	---	ND	---	0.0100
138	129/138/163	---	---	ND	---	0.0600
139	139/140	---	---	ND	---	0.0200
140	139/140	---	---	ND	---	0.0200
141		---	---	ND	---	0.0200
142		---	---	ND	---	0.0100
143	134/143	---	---	ND	---	0.0200
144		---	---	ND	---	0.0100
145		---	---	ND	---	0.0400
146		---	---	ND	---	0.0100
147	147/149	---	---	ND	---	0.0200
148		---	---	ND	---	0.0100
149	147/149	---	---	ND	---	0.0200
150		---	---	ND	---	0.0100
151	135/151	---	---	ND	---	0.0200
152		---	---	ND	---	0.0100
153	153/168	---	---	ND	---	0.0400
154		---	---	ND	---	0.0100
155		---	---	ND	---	0.0100
156	156/157	---	---	ND	---	0.0200
157	156/157	---	---	ND	---	0.0200
158		---	---	ND	---	0.200
159		---	---	ND	---	0.0100
160		---	---	ND	---	0.0100
161		---	---	ND	---	0.0100
162		---	---	ND	---	0.0100
163	129/138/163	---	---	ND	---	0.0600
164		---	---	ND	---	0.0100
165		---	---	ND	---	0.0100
166	128/166	---	---	ND	---	0.0200
167		---	---	ND	---	0.0200
168	153/168	---	---	ND	---	0.0400
169		---	---	ND	---	0.0120
170		---	---	ND	---	0.0100
171	171/173	---	---	ND	---	0.0200
172		---	---	ND	---	0.0100
173	171/173	---	---	ND	---	0.0200
174		---	---	ND	---	0.0100
175		---	---	ND	---	0.0100
176		---	---	ND	---	0.0100
177		---	---	ND	---	0.0100
178		---	---	ND	---	0.0100
179		---	---	ND	---	0.0100
180	180/193	---	---	ND	---	0.0400

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Blank Analysis Results

Lab Sample ID BLANK-35566
Filename P130305B_06

IUPAC	Co-elutions	RT	Ratio	Concentration ng/S	EMPC ng/S	EML ng/S
181		---	---	ND	---	0.0100
182		---	---	ND	---	0.0100
183	183/185	---	---	ND	---	0.0200
184		---	---	ND	---	0.0100
185	183/185	---	---	ND	---	0.0200
186		---	---	ND	---	0.0100
187		---	---	ND	---	0.0100
188		---	---	ND	---	0.0100
189		---	---	ND	---	0.0200
190		---	---	ND	---	0.0100
191		---	---	ND	---	0.0100
192		---	---	ND	---	0.0100
193	180/193	---	---	ND	---	0.0400
194		---	---	ND	---	0.0150
195		---	---	ND	---	0.0150
196		---	---	ND	---	0.0150
197	197/200	---	---	ND	---	0.0300
198	198/199	---	---	ND	---	0.0300
199	198/199	---	---	ND	---	0.0300
200	197/200	---	---	ND	---	0.0300
201		---	---	ND	---	0.0150
202		---	---	ND	---	0.0150
203		---	---	ND	---	0.0150
204		---	---	ND	---	0.0150
205		---	---	ND	---	15.0
206		---	---	ND	---	0.0300
207		---	---	ND	---	0.0150
208		---	---	ND	---	0.0150
209		---	---	ND	---	0.0184

Conc = Concentration
EML =Method Specified Reporting Limit (1668A)
EMPC = Estimated Maximum Possible Concentration
A = Limit of Detection based on signal to noise
B = Less than 10 times higher than method blank level
R = Recovery outside of Method 1668A control limits
ng/L = Nanograms per liter

ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
X = Outside QC Limits
RT = Retention Time
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyl
Blank Analysis Results

Client Sample ID	DFBLKMP
Lab Sample ID	BLANK-35566
Filename	P130305B_06

Congener Group	Concentration ng/S
Total Monochloro Biphenyls	0.0286
Total Dichloro Biphenyls	0.189
Total Trichloro Biphenyls	ND
Total Tetrachloro Biphenyls	ND
Total Pentachloro Biphenyls	ND
Total Hexachloro Biphenyls	ND
Total Heptachloro Biphenyls	ND
Total Octachloro Biphenyls	ND
Total Nonachloro Biphenyls	ND
Decachloro Biphenyls	ND
Total PCBs	0.218

ND = Not Detected

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCS-35567		
Filename	P130304A_03	Matrix	PUF
Total Amount Extracted	1.00 Sample	Dilution	3
ICAL ID	P130304A02	Extracted	02/28/2013 12:30
CCal Filename(s)	P130304A_01	Analyzed	03/04/2013 12:45
Method Blank ID	BLANK-35566	Injected By	SMT

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	Native Analytes			Labeled Analytes			
PCB Isomer	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery	
1	1.0	1.05	105	2.0	0.123	6	R
3	1.0	1.05	105	2.0	0.304	15	
4	1.0	1.10	110	2.0	0.321	16	
15	1.0	0.958	96	2.0	0.713	36	
19	1.0	0.932	93	2.0	0.653	33	
37	1.0	0.931	93	2.0	1.09	54	
54	1.0	0.998	100	2.0	0.857	43	
81	1.0	0.982	98	2.0	1.29	65	
77	1.0	0.921	92	2.0	1.42	71	
104	1.0	1.01	101	2.0	1.00	50	
105	1.0	0.958	96	2.0	1.53	77	
114	1.0	0.940	94	2.0	1.57	79	
118	1.0	1.03	103	2.0	1.51	76	
123	1.0	1.04	104	2.0	1.47	74	
126	1.0	0.997	100	2.0	1.44	72	
155	1.0	1.04	104	2.0	1.31	65	
156/157	2.0	1.93	97	4.0	3.72	93	
167	1.0	0.999	100	2.0	1.85	92	
169	1.0	0.954	95	2.0	1.87	93	
188	1.0	0.988	99	2.0	1.12	56	
189	1.0	0.974	97	2.0	1.36	68	
202	1.0	1.01	101	2.0	1.30	65	
205	1.0	1.12	112	2.0	1.66	83	
206	1.0	1.01	101	2.0	1.98	99	
208	1.0	0.978	98	2.0	1.40	70	
209	1.0	1.19	119	2.0	1.67	84	

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C Polychlorobiphenyls
Laboratory Control Spike Analysis Results

Lab Sample ID	LCSD-35568		
Filename	P130304A_04	Matrix	PUF
Total Amount Extracted	1.00 Sample	Dilution	3
ICAL ID	P130304A02	Extracted	02/28/2013 12:30
CCal Filename(s)	P130304A_01	Analyzed	03/04/2013 13:48
Method Blank ID	BLANK-35566	Injected By	SMT

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	Native Analytes			Labeled Analytes		
PCB Isomer	Spiked (ng)	Found (ng)	% Recovery	Spiked (ng)	Found (ng)	% Recovery
1	1.0	1.07	107	2.0	0.546	27
3	1.0	1.07	107	2.0	0.877	44
4	1.0	1.03	103	2.0	0.853	43
15	1.0	1.06	106	2.0	0.861	43
19	1.0	1.05	105	2.0	0.901	45
37	1.0	0.955	96	2.0	1.16	58
54	1.0	1.03	103	2.0	1.03	52
81	1.0	0.985	99	2.0	1.27	64
77	1.0	0.944	94	2.0	1.41	70
104	1.0	1.06	106	2.0	1.13	56
105	1.0	1.00	100	2.0	1.46	73
114	1.0	1.01	101	2.0	1.47	74
118	1.0	1.14	114	2.0	1.41	70
123	1.0	1.04	104	2.0	1.40	70
126	1.0	1.01	101	2.0	1.26	63
155	1.0	1.00	100	2.0	1.38	69
156/157	2.0	2.02	101	4.0	3.21	80
167	1.0	1.01	101	2.0	1.63	81
169	1.0	0.979	98	2.0	1.60	80
188	1.0	1.03	103	2.0	1.14	57
189	1.0	1.000	100	2.0	1.26	63
202	1.0	1.04	104	2.0	1.21	61
205	1.0	1.13	113	2.0	1.55	77
206	1.0	0.971	97	2.0	1.81	91
208	1.0	0.960	96	2.0	1.28	64
209	1.0	1.22	122	2.0	1.49	75

R = Recovery outside of method 1668A control limits
Nn = Result obtained from alternate analysis
ND = Not Detected
NA = Not Applicable
NC = Not Calculated
* = See Discussion
ng = Nanograms
I = Interference

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414

Tel: 612-607-1700
Fax: 612- 607-6444

Method 1668C

Spike Recovery Relative Percent Difference (RPD) Results

Client	Pace Analytical		
Spike 1 ID	LCS-35567	Spike 2 ID	LCSD-35568
Spike 1 Filename	P130304A_03	Spike 2 Filename	P130304A_04

Compound	IUPAC	Spike 1 %REC	Spike 2 %REC	%RPD
2-MoCB	1	105	107	1.9
4-MoCB	3	105	107	1.9
2,2'-DiCB	4	110	103	6.6
4,4'-DiCB	15	96	106	9.9
2,2',6-TrCB	19	93	105	12.1
3,4,4'-TrCB	37	93	96	3.2
2,2',6,6'-TeCB	54	100	103	3.0
3,3',4,4'-TeCB	77	92	94	2.2
3,4,4',5-TeCB	81	98	99	1.0
2,2',4,6,6'-PeCB	104	101	106	4.8
2,3,3',4,4'-PeCB	105	96	100	4.1
2,3,4,4',5-PeCB	114	94	101	7.2
2,3',4,4',5-PeCB	118	103	114	10.1
2,3',4,4',5'-PeCB	123	104	104	0.0
3,3',4,4',5-PeCB	126	100	101	1.0
2,2',4,4',6,6'-HxCB	155	104	100	3.9
(156/157)	156/157	97	101	4.0
2,3',4,4',5,5'-HxCB	167	100	101	1.0
3,3',4,4',5,5'-HxCB	169	95	98	3.1
2,2',3,4',5,6,6'-HpCB	188	99	103	4.0
2,3,3',4,4',5,5'-HpCB	189	97	100	3.0
2,2',3,3',5,5',6,6'-OcCB	202	101	104	2.9
2,3,3',4,4',5,5',6-OcCB	205	112	113	0.9
2,2',3,3',4,4',5,5',6-NoCB	206	101	97	4.0
2,2',3,3',4,5,5',6,6'-NoCB	208	98	96	2.1
Decachlorobiphenyl	209	119	122	2.5

%REC = Percent Recovered
RPD = The difference between the two values divided by the mean value

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REPORT OF LABORATORY ANALYSIS

FIELD FORMS

THE JOHNSON COMPANY, INC.
100 State Street, Suite 600
Montpelier, Vermont 05602
(802) 229-4600

Air Sampling Form for PCBs and Pesticides using EPA Method TO-10A

Project Name: JARD - 403 Park Street Project #: 3-2218-5

Site Location: Bennington, VT Sampler: DPB/SJH Dates Sampled: ~~2/20/13~~ 2/20-2/21/13

Pump Type/Model No. : SKC 224-PCXR8 Calibrated By: DPB/SJH

Pump Serial No: ~~827736~~ 917682 Rain (Y or N?): N

ABSORBENT CARTRIDGE INFORMATION:

	Cartridge 1	Cartridge 2	Cartridge 3
Type:	PUF		
Sorbent:	104elle		
Serial No.: 2-20-13	~~827736~~ 917682		
Sample No.:	403 Living room		

SAMPLING DATA:

Cartridge 1

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	21°C		4.05	1122	1118		
	21°C		3.86 ✓	STOP			

Cartridge 2

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		

Cartridge 3

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		

Notes: _____

THE JOHNSON COMPANY, INC.
100 State Street, Suite 600
Montpelier, Vermont 05602
(802) 229-4600

Air Sampling Form for PCBs and Pesticides using EPA Method TO-10A

Project Name: JARD - 406 Park Street Project #: 3-2218-5

Site Location: Bennington, VT Sampler: DPB/SJH Dates Sampled: 2/20/13-2/21/13

Pump Type/Model No. : SKC 224-PCXR8 Calibrated By: DPB/SJH

Pump Serial No. below Rain (Y or N?): N

ABSORBENT CARTRIDGE INFORMATION:

	Cartridge 1	Cartridge 2	Cartridge 3
Type:	PUF	PUF	
Sorbent:	104609	104607	
Serial No.:		827715	
Sample No.:	406 Dining Room	406 Basement	

SAMPLING DATA:

Cartridge 1 Dining Room

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	22°C		4.11	1240	1243		
	24°C		3.50@	STOP			

Cartridge 2 Basement

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	11°C		4.01	1239	1244		
	14°C		3.80@	STOP			

Cartridge 3

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		

Notes: _____

THE JOHNSON COMPANY, INC.
100 State Street, Suite 600
Montpelier, Vermont 05602
(802) 229-4600

Air Sampling Form for PCBs and Pesticides using EPA Method TO-10A

Project Name: JARD-410 Park Street Project #: 3-2218-5

Site Location: Bennington, VT Sampler: DPB/SJH Dates Sampled: 2/20/13-2/21/13

Pump Type/Model No. : SKC 224-PCXR8 Calibrated By: DPB/SJH

Pump Serial No. _____ Rain (Y or N?): N

ABSORBENT CARTRIDGE INFORMATION:

	Cartridge 1	Cartridge 2	Cartridge 3
Type:	PUF	PUF SJH 2-20-13	
Sorbent:	104613	~~104607~~ 104608	
Serial No.:		917475	
Sample No.:	410 Basement	410 Living Room	

SAMPLING DATA:

Cartridge 1 Basement

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	10°C		4.22	1:15	1314		
	13°C		3.79 @ Stop				

Cartridge 2 Living Room

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	~20°C		4.07	1:30	1323		
	19°C		4.13 @ Stop				

Cartridge 3

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		

Notes: _____

THE JOHNSON COMPANY, INC.
100 State Street, Suite 600
Montpelier, Vermont 05602
(802) 229-4600

Air Sampling Form for PCBs and Pesticides using EPA Method TO-10A

Project Name: JARD – 414 Park Street Project #: 3-2218-85

Site Location: Bennington, VT Sampler: ~~DPB~~ DPB/SJH Dates Sampled: 2/20/13 – 2/21/13

Pump Type/Model No. : SKC 224-PCXR8 Calibrated By: DPB/SJH

Pump Serial No. see below Rain (Y or N?): N

ABSORBENT CARTRIDGE INFORMATION:

	Cartridge 1	Cartridge 2	Cartridge 3
Type:	PUF	PUF	
Sorbent:	104610	104610	
Serial No.:	~~38888~~ SJH 2/20/13 799062	827841	
Sample No.:	414 Living Room	414 Basement	

SAMPLING DATA:

Cartridge 1 Living Room

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
start	20°C		5.01	0922	0920		
stop	20°C		4.74@ stop				

Cartridge 2 Basement

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
start	7°C		4.32*	0919	0921		
Stop	7°C		3.79@ stop				

Cartridge 3

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		

Notes: * could not increase flow above 4.3 L/min

THE JOHNSON COMPANY, INC.
100 State Street, Suite 600
Montpelier, Vermont 05602
(802) 229-4600

Air Sampling Form for PCBs and Pesticides using EPA Method TO-10A

Project Name: JARD-418 Park Street Project #: 3-2218-5

Site Location: Bennington, VT Sampler: DPB/SJH Dates Sampled: 2/20/13-2/21/13

Pump Type/Model No. : SKC 224-PCXR8 Calibrated By: DPB/SJH

Pump Serial No. See below Rain (Y or N?): N

ABSORBENT CARTRIDGE INFORMATION:

	Cartridge 1	Cartridge 2	Cartridge 3
Type:	PUF	PUF	PUF
Sorbent:	1046006	1046012	1046014
Serial No.:	827740	827233	827665
Sample No.:	418 Kitchen	418 Basement	418 Outdoor

SAMPLING DATA:

Cartridge 1 Kitchen

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	22°C		4.7 5.00 SJH 2-20-13	1036	1028		
	25°C		4.91 C	STOP			

Cartridge 2 Basement

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	15°C		4.98	1043	1042		
	18°C		4.91 C	Stop			

Cartridge 3 Outdoor

Time	Ambient Temp, °C / F	Ambient Pressure, in Hg	Flow Rate (Q), mL/min or L/min	Sampling Period		Total Sampling Time, min or hours	Total Sample Volume, L
				Start	Stop		
	-3.5°C		4.70	1039	1034		
	-3.5°C		4.80 C	STOP			

Notes: _____